This proceedings contains 60 conference papers that address critical issues related to rural education, special education, teacher training, school reform, and services for students who are at risk. The conference theme of rural partnerships recognizes the diversity of the ACRES membership and the need for developing and maintaining successful working relationships among rural professionals, community agencies, and families. Topics include management and leadership models that encompass female executives, academic alliances, rural teacher induction, rural inservice training using distance technologies or a career ladder approach, rural transdisciplinary team training, child care for young disabled children, preparing general educators for inclusion, training special education teachers to use telecommunications, read aloud programs and parent participation, intergenerational entrepreneurship, deaf education using interactive television, teacher study groups, gifted education in rural areas, rural collaboration on a transition task force, fetal alcohol syndrome in rural classrooms, alternative certification in special education, portfolio assessment in teacher education, student behavior in rural mainstreamed settings, leisure activities for mentally retarded adults, parental aspirations for learning disabled students, rural teachers' beliefs about inclusion, itinerant-model service delivery in rural settings, transitional programs, meeting the needs of medically fragile students, dropout prevention, teacher collaboration, rural school-community partnerships for transition, creativity training, negotiated program evaluation, administrator training, migrant education, parent participation along the Mexican border, rural parent and staff development, grief counseling, collaborative consultation, college as a transition option, total quality learning in rural settings, adaptive and assistive technology, and potential outcomes for special education. A topical index broadly categorizes papers into the following areas: administration, at-risk students, collaborative education models, early childhood, gifted, low incidence populations, parents and families, preservice and inservice teacher training, technology, and transition.
Rural educators, preservice educators, administrators, special educators, related service providers, policymakers, and parents address critical issues related to rural education, special education, teacher training, school reform, and services for students who are at-risk.
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Introduction

Welcome to the content for the Fourteenth Annual National Conference for the American Council on Rural Special Education (ACRES)! We are meeting in Austin, Texas for a week of professional renewal and exchange, March 23-26, 1994. Our theme for this year was generated from last year's conference work on issues, concerns and needs in rural special education in the United States. The theme recognizes the diversity of our membership and the need for developing and maintaining successful working relationships among the variety of professionals, community agencies and the family of students with diverse abilities living in rural areas. We are proud to present RURAL PARTNERSHIPS: WORKING TOGETHER!

This book represents the collection of papers presented at the conference. It is organized in the order the papers are presented to be useful to you at the conference. We have included an index of the papers by the topical strand in which each was presented so that this proceedings will be useful to you after the conference as you reference specific areas of work.

There are several forums for paper presentations at ACRES conferences. We proudly recognize our rural heritage and capitalize on our strengths: variety, intensity, a hard-working group, small in numbers; but, dedicated to innovation and accomplishing goals. For this reason, we usually have a large number of smaller sessions. We start our with HOT TOPIC DISCUSSIONS to generate interest groups, goals for conference work and an opportunity to "network" with other participants. This year we hope to develop work in four areas, three of the papers are included here: (1) women in leadership, (2) academic alliances in the humanities, and (3) the induction of teachers in rural schools. Regional funding possibilities is the fourth area for discussion.

This year we offer PROMISING PRACTICES, programmatic information on strategies, methods or models that have been proven effective in rural areas. The RESEARCH presentations are organized to allow more discussion among the participants. These sessions may generate other research ideas, national research teams, or special interest groups for next year's conference. Additionally, our POSTER sessions allow a personal interaction with directors of successful programs and rural educational researchers.

The topics offered herein are broadly categorized by the following areas of concern: Administration, At-Risk Students, Collaborative Education Models, Early Childhood, Gifted, Low-Incidence Populations, Parents and Families, Pre-service and In-service Teacher Training, Technology, and Transition. Many of the papers have multiple applications and all relate to the conference theme of developing or maintaining successful working relationships.

Our authors are an impressive group of scholars! Representing public and private schools and agencies, regional and state agencies, institutions of higher education and private consulting firms, each author contributes significantly to the success of the conference and to the national dissemination of valuable information about rural education.

ACRES Program Chairpersons,
Diane Montgomery and Kay S. Bull
NEEDED: A THEORY INCLUDING WOMEN EXECUTIVES IN THE RURAL CULTURE

Management and leadership models are based on theories of male leadership behavior. As more women attempt to break the glass ceiling by positioning themselves for executive positions, current theory needs to be reevaluated and revaluated. (The term, "reevaluated," herein, deals with the technical examination of the subject, while the term, "revaluated," refers to an examination of deep, personal value systems.) There is a need to modify the existing male value-laden theoretical paradigm used in management and leadership training programs.

Background

Although there is existing, related research which documents the need for the proposed study, currently there is no research which addresses: 1. differences in gender perceptions of leadership effectiveness in organizational culture, 2. origins of these perceptions, 3. women's culture within the executive ranks, and 4. women's experiences in rural systems versus urban systems. The lack of research in these areas of leadership results in an insufficient theory base. The literature is clear that existing management and leadership theories are not viable for women and that there needs to be a reconceptualization of theory to include experiences of both men and women (Shakeshaft, 1992), inclusive of rural systems.

The 1970's marked the beginning research on women executives. There are five stages of women's study which bring us up-to-date. Those stages are 1) numbers of women documented, 2) search for women who have been or are administrators (dealing with attitudes), 3) women as disadvantaged or subordinate (barriers women face), 4) women studied on their own terms (the world of women), and 5) women as challenge to theory (Shakeshaft, 1987). With only twenty years of research, the field is considered relatively new; the data that we do have point out two findings which strongly support the need for continued and proposed research: 1.) the profiles of women executives and their history in top management positions are not the same as the profiles and history of men in similar positions (Shakeshaft, 1992), and 2.) the legacy of discrimination and exclusion has shaped a world in which women's experiences and behaviors are often unlike those of men (Shakeshaft, 1986).

An additional body of research is needed that does not currently exist but which is necessary to move to a sixth stage of women's studies -- transformation of current theory essential for up-to-date training programs.

Training programs to-date are skewed with an outmoded and exclusionary premise. The exclusion of women, both urban and rural, in current management/leadership theories calls for research in five areas.

Female and Male Leadership Behavior

Male leadership behavior has been studied extensively with resulting assumptions generally being applied to all behavior. Do the theories that prescribe leadership behaviors work just as well for women as for men? Do theories that explain male behavior also explain female behavior and female effectiveness as leaders? Can we generalize from the world of male executives to the world of females? Do males and females view successful leaders in the same way? Are leadership skills for females and males different in rural versus urban areas?
Are these views based on formal educational training which in turn is based on theoretical models that have been based on male behavior? Are leadership behaviors used by females perceived as positive by both men and women?

**Executive Culture and Women's Lives in Organizations - Rural and Urban**

Studies of women in organizations would suggest that theories based upon male behavior and male samples are inadequate for understanding women's lives in organizations and vice versa. Why, in spite of the fact that women are superior transformational leaders (Shakeshaft, 1987), are so few women successful in attaining top level positions? What is there in executive culture that prevents their inclusion and prevents systems from becoming more inclusive in nature? (An inclusively oriented system is one in which the knowledge and conditions conducive to quality and success are available to all individuals within the system (Brown, Irby, & Smith, 1993).

**Communication Differences between Males and Females**

Communication differences between males and females (Tannen, 1990) have been documented, and theorists have long recognized that communication skills are important for leadership. Do communication differences between males and females impact perceptions of leadership effectiveness? Do women communicate that they are weaker leaders? Are communication patterns of successful women in urban/suburban schools the same as those of successful women leaders in rural schools?

**Genders Differences in Establishing Authority as Leaders**

Shakeshaft (1987) discusses the need for examining ways women establish authority. According to Shakeshaft (1987) "there are a number of ways that males and females have been advised to establish their authority as leaders, but very little has been done to determine whether these approaches work for women" (p.14). How do women establish authority? Are women in authority seen as threatening? Are women who assert their power perceived in positive or negative ways? Do women establish authority in the same way as men? How does the traditional, conservative culture of rural communities affect female authority?

**Formal Training for Executives**

What is taught in management and leadership programs based on organizational theory of Maslow, Getzels and Guba, Fieldler, and the Ohio State Leadership studies is male-dominated (Shakeshaft & Nowell, 1984). They state, "even in subsequent replications of these research studies, which included females in the samples and which tried to account for the effects of gender, the findings and interpretations were tainted by the androcentrism of the primary research "(p.200). Problems arise from this research outlook and paradigm which does not suit the female perspective. Is the type of training executives continue to receive a reason for women's problems in breaking the glass ceiling? Is the present educational training system within colleges, universities, and business one of exclusion? Existing training is perceived as ineffective by rural administrators (Jacobson & Woodworth, 1989). Is this training equally ineffective for both men and women?

**Re-envisioning and Revaluating Current Theory**

Brown and Irby (1993) call for re-envisioning or revaluating the leadership theory and practice which has been based upon andocentric assumptions which do not take into account possible differences in skills and behaviors necessary for successful leadership in rural schools. This is but a piece of the research needed to begin to rethink how we know and what we know about leadership and leadership training programs. The ultimate impact of such a study would be to rethink how we as educators in business and in education train potential leaders. The theory base being proclaimed as truth and taught as dogma is entrenched in training programs and should be challenged.
Significance of the Call

If the current higher educational system is successful in acculturating a succeeding generation in the traditional paradigm of organizational theory, in modeling and imaging current administrators in organizations, then we can expect the succeeding generation of administrators to continue to be predominately male, above 83 percent (Marshall, 1992). If training and acculturation is complete, if the status quo is maintained and no new theory base is promoted, the female administrator will be relatively absent, particularly in the rural school. The female administrative voice will be a scarce commodity, only a token. Major researchers in the field of women's issues call for a reconceptualization of management and organizational theory which takes women into account (Shakeshaft, 1987). This reconceptualization must include research on women in both rural and urban settings. If the glass ceiling is to be broken, if paradigms are to be modified, then new theories in leadership must be put forward. This study has national significance in that the findings will assist those of us who are working in the field of women's issues and leadership issues in establishing a broader theory base from which to develop leadership training. Institutions, both business and educational, will benefit from the findings of this research.

SELECTED REFERENCES


ACADEMIC ALLIANCES, YOU CAN DO IT TOO

The Arkansas Network of Humanities Academic Alliances is a collaborative, statewide network of school and college teachers in humanities disciplines who meet regularly to promote ongoing professional development and work toward common objectives. This network is housed on the campus of Henderson State University, Arkadelphia, Arkansas.

Experience with academic alliances in Arkansas can assist others in developing and maintaining similar relationships. This experience is central to the you-can-do-it-too theme of this paper.

Project Objectives

The Arkansas' Network of Humanities Academic Alliances
(1) strengthens humanities teaching at all educational levels;
(2) improves student learning in the humanities;
(3) fosters lasting, local professional relationships between school and higher education faculty in the humanities;
(4) provides ongoing support for established humanities alliances; and
(5) assists the formation of emerging alliances.

Dr. Robert Steinmiller, Project Director, is housed at Henderson State University which provides administrative support, in-kind services in the form of an on-campus office, half-time clerical support and related administrative assistance. The Arkansas Department of Higher Education provides project advising and financial assistance.

Dr. Steinmiller facilitates development of local alliances by (1) conducting faculty surveys to build new alliances especially among under-represented or under-served populations; (2) organizing workshops, conferences, and inservice; (3) providing ongoing technical support to organized alliances, and (4) improving public awareness of humanities alliances through newsletters and public relations. Dr. Steinmiller disseminates information on humanities alliance activities to education policy-makers and to humanities scholars not yet involved in alliances. Contact is made with Chambers of Commerce, business and industry, and professional societies to promote humanities alliances in their local areas. Dr. Steinmiller attends professional meetings of humanities groups.
Audience Served by This Project

Current humanities alliances exist representing history, social studies, communications, English, reading, whole language, journalism, foreign language, geography, and all Arkansas school and college humanities faculty comprise the target audience for this project. Other beneficiaries of project activities include the students of alliance participants and their professional colleagues. An important product of alliance building is greater visibility for the humanities in the local community as business leaders, parents and public officials become aware of this collaboration.

Steps That Facilitate Alliance Formation

First initial interest needs to be stimulated. Seed money from grant's providers often have a goal to develop collaboration among educators on the school and collegiate levels. A presentation or paper such as this will also spark interest that promotes alliance formation. Environmental necessity requiring shared resources may stimulate further collaboration. The state network or established local alliances may reach out to regions in need of alliance benefits. Once initial interest is stimulated, more substantial support is sought.

An initial interest meeting is arranged. Potential alliance leaders and participants come together to set an interest meeting. Often, faculty lounge conversation or school faculty taking graduate credit on a university campus lead to linkage that seeks resources to bring potential alliance members together.

The Arkansas Network of Academic Alliances has as primary goal the support of these initial meetings. Interested faculty often contact the Network for assistance in preparing and executing this initial meeting. A location, time and tentative agenda are established. The goal is to begin the process that leads to independence of the future alliance.

The Network helps publicize this initial meeting. Local newspapers may print news releases. Local school districts may publicize and even host the meeting. Regional educational cooperatives are often quite helpful. Local universities and colleges often lend resources to the endeavor.

Financial support is available to bring in resource persons, pay for meeting expenses and help get the Alliance started. To receive assistance, the group must be willing to set up a steering committee composed of both school and college faculty, develop concrete goals and objectives, and agree to have additional meetings.
Resources For Assisting Local Alliances:

The Arkansas Network of Academic Alliance will support the alliance efforts to achieve its goals in the following ways:

1. Pay carpool mileage, reasonable meal expenses and substitute pay for at least one meeting per year. Proposed expenses must be cleared with the Network in writing and in advance. Support for additional meetings will depend on alliance goals and quality of activities.

2. The Network can defray postage and paper cost for sending out meeting notices. The Network will mail memos about meetings if provided with a master copy if the appropriate information at least two weeks in advance. Updates on mailings lists should be forwarded to the Network.

3. The Network will periodically produce and distribute a statewide alliance newsletter to keep the members posted on what is going on around the state. Alliances are encouraged to provide the Network with news about its plans and accomplishments; this is evidence that you are meeting objectives and will help the Network decide on continued support.

4. The Network will keep alliances posted on projects around the nation. If the alliance is interested in pursuing some major goal such as restructuring, the network helps planning to that end.

Initial Meetings

At the initial meeting, personal data sheets are filled out. Information regarding areas of interest and willingness to be involved are expressed. Communication is a key to networking and the information on this sheet facilitates linkage. Work address, phone, and office hours are identified. Usually, participants provide home address, phone and times available as well. This home information is helpful if work communications prove to be inefficient.

A clear sense of purpose, direction and leadership must be nurtured at the initial meeting. The Network leader or local emergent leader must guide the alliance to identify projects and purpose. This initial direction is flexible but must be clarified.

A steering committee is essential. School and college faculty must be represented. One contact person must be identified. This contact person is the conduit through whom the state coordinator can reach the full alliance.

Most importantly, a champion or set of champions and support institutions must provide the energy, effort and interest to initiate, form, and continue academic alliances.
Continued Alliance Workshops and Conferences

Each alliance holds meetings that are of professional benefit to each participant. Alliances set a calendar that includes meetings, goals and objectives: some meet three or more times a year. Some alliance activities are as follows:

1. Teachers share curriculum ideas with copies of lessons for each alliance member. Guest speakers are brought in to discuss a theme.

2. Alliances take part in cultural events. The South Arkansas Foreign Language Alliance conducted a foreign language festival for high school students. West Arkansas Foreign Language Alliance provided ethnic dances for a leaders meeting.

3. Newsletters and minutes of meetings are generated to communicate to all members.

4. Leaders from one area of the state visit other alliances in other parts of the state.

5. Alliances assist in maintaining membership information in the Arkansas Network of Academic Alliances data base at Henderson State University. This database of 2724 names serves as the distribution list for an alliances newsletter as well as individual alliance meeting announcements. Alliances are encourage to maintain this data in local files as well.

6. Alliances assist in the publication and distribution of an alliance newsletter that communicates with alliance members and potential participants.

7. Alliances participate in statewide grand alliance meetings that brings professionals together from across the state.

8. Leaders meetings are conducted to develop skills to assist the alliances in effectiveness and efficiency.

Leader's Alliances

One of the most important phases of the alliance movement has been the establishment of alliances of alliances. Leaders from alliances in a common academic area such as communications, foreign language, language arts, reading and social studies have formed into alliances that meet to disseminate information to their alliances. The leaders alliances help acquire resources for the alliances, and are designed to carry the alliance movement back to the grassroots level. Dependence on the Network as a whole for resources is reduced. Continuation of the alliance movement is hopefully ensured by the leaders alliances carrying on the work of maintaining the alliances in their interest areas.
Review of Existing Alliances

LANGUILLA AREA LANGUAGE ALLIANCE (LALA): French, Spanish, and Japanese faculty from Forrest City High School, East Arkansas Community College, and schools in Crittenden, West Memphis, Lee, Monroe, Phillips, and St. Francis counties are supported by the Great Rivers Educational Cooperative.

SOUTH ARKANSAS FOREIGN LANGUAGE ALLIANCE (SAFLA): This model academic alliance often meets in members' homes sharing potluck foreign dishes and recipes. They host a foreign language festival.

WEST ARKANSAS FOREIGN LANGUAGE ALLIANCE (WAFLA): This alliance supported by Westark Community College serves French, German, Latin, and Spanish faculty.

ARKANSANS FOR WHOLE LANGUAGE - STUTTGURT: Three elementary schools work with University of Arkansas at Little Rock, University of Central Arkansas and University of Arkansas at Pine Bluff.

ALLIANCE OF COMMUNICATION EDUCATORS (ACE): The Arkansas Communication Association is a leaders alliance to address curriculum concerns. Specific curriculum suggestions were presented to the Arkansas Department of Education. A survey of 1443 communication educators in October 1993 gave the leaders alliance specific direction.

COSSATOT WHOLE LANGUAGE ALLIANCE (CWLA): The De-Queen Mena Educational Cooperative, Henderson State University and Southern Arkansas University faculty work with language teachers.

CENTRAL ARKANSAS ALLIANCE FOR WHOLE LITERACY (CAWLA): Faculty from Little Rock Public Schools and The University of Arkansas at Little Rock plan goals, time lines, and philosophy on a yearly basis.

CREATIVE LEARNING (CL): Nevada Elementary working with Southern Arkansas University, Henderson faculty, Hope Educational Cooperative staff and local schools in Hempstead and Nevada counties has conducted a grants workshop and a number of curriculum sharing meetings.

NORTHWEST ARKANSAS WHOLE LANGUAGE ALLIANCE (NAWLA): This large alliance in Springdale Arkansas had 140 persons its initial meeting. University of Arkansas Fayetteville and Happy Hollow School faculty provide direction.

MONTECELLO JOURNALISM ALLIANCE (MJA): The University of Arkansas at Montecello works with local school journalism faculty.

WESTARK LANGUAGE ARTS ALLIANCE (WALA): This alliance developed a newsletter Motivate for the alliance members.

WESTARK JOURNALISM ALLIANCE: This alliance focuses on mass media topics.
WEST ARKANSAS SPEECH ALLIANCE: Speech teachers from Fort Smith Northside High School, Southside High School and Westark Community College work together to explore issues regarding school debate, speech and theatre.

ALLIANCE FOR THE VISUAL AND PERFORMING ARTS (AVPA): Faculty from the DeQueen-Mena Educational Cooperative service area believe that the visual and performing arts are important teaching aids in academic subject areas.

BRADFORD ART ALLIANCE: Bradford High School faculty formed this art interest alliance.

EL DORADO MUSIC ALLIANCE: Faculty from South Arkansas Community College, Barton Middle School, Arkansas High School, Texarkana Community College, Magnolia High School, Fairview High School and Southern Arkansas University promote music education.

ARKANSAS GEOGRAPHIC ALLIANCE: The Arkansas Geographic Alliance is a model for other alliances. Its summer institutes are popular. The alliance hosts a geography essay contest for fifth through seventh grade students, as well as a National Geographic Awareness Week.

ARKANSAS LEADERS ALLIANCE IN THE SOCIAL STUDIES (ALASS): This leaders group is an umbrella for social studies teachers to review curriculum revision and make suggestions to the Arkansas Department of Education.

MIDDLE LEVEL INTERDISCIPLINARY ALLIANCE (MLIA): A number of University faculty across the disciplines including math and science work with middle school faculty.

MILLS ALLIANCE FOR THE SOCIAL STUDIES (MASS): Harding University and the Wilber Mills Educational Cooperative support this alliance including social studies faculty and administrators from ASU/Beebe, Harding University, Harding Academy and public schools.

SOUTH ARKANSAS SOCIAL SCIENCE ALLIANCE (SASSA): The Southern Center for International Studies, Dawson Educational Cooperative, Ouachita Baptist University and Henderson State University worked with this alliance to host a major conference on the Soviet Union.

SOUTHEAST ARKANSAS HISTORY TEACHING ALLIANCE (SEAHTA): The University of Arkansas at Monticello is a model alliance hosting leadership trips to West Africa, Egypt, Israel, as well as significant historical sites in Arkansas.

SOUTHWEST ARKANSAS SOCIAL STUDIES ALLIANCE (SWASSA): Southern Arkansas University works closely with the Arkansas Historical Restoration and other social studies agencies with teachers.

WOODWARD INSTITUTE ALLIANCE: This alliance developed out of a C. Vann Woodward Summer Institute at Henderson State University.
TEACHER INDUCTION IN RURAL AND SMALL SCHOOL DISTRICTS

The literature shows clearly that administrators in rural or small schools find it extremely difficult to locate and hire qualified teachers who are likely to fit in smoothly to both the school and community and to stay in that job for a long time. The attrition rate in rural and small schools is extremely high; Helge and Marrs (1981, p. 12) reported a turnover rate of 30-50% in rural areas, culminating in a complete turnover every three years. The major problems for new teachers in rural districts, according to district administrators, include the adjustment to geographic isolation, population sparsity, and difficulty with "community fit" into the lifestyle and expectations of the community (Horn, 1985, p. 13). Many districts report difficulty in locating qualified applicants for positions that are vacant for long periods of time (Helge and Marrs, 1981, p. 2). Hare sums up the problems of rural and small schools trying to compete against urban or suburban systems: rural and small schools can offer "...neither the higher salaries of larger systems, faster pace of urban-suburban living, or staffed personnel departments with recruiting budgets" (Hare, 1988, p. 2).

RECRUITMENT

The problems arise in finding qualified teachers for these positions. The characteristics described "ideal" for a teacher in a rural school include being certified to teach more than one subject area or grade level in the same classroom during the same time span, being able to teach students with a wide range of abilities in a single classroom, and being able to overcome the students' cultural differences and add to their understanding of the larger society. Other desirable characteristics include being prepared to supervise several extra-curricular activities and the ability to adjust to the uniqueness of the community in terms of social opportunities, lifestyles, and loss of privacy (Campbell, 1985, p. 7 and Horn, 1985, p. 14). Sher reports that "...the best rural teachers are the ones who are able to cope with sparsity, utilize community resources, invent curricular materials, and above all else, are oriented toward teaching children rather than subjects" (Sher, 1977, p. 287).
One recruitment strategy that districts report as successful is to stress the benefits of working in rural and small schools. In a study reported by Nachtigal, teachers in rural schools responded more positively about their level of general job satisfaction than teachers in urban schools (Nachtigal, 1992, p. 76). Teachers in rural and small schools often report there are many positive features to working in small schools and communities, including small class size, increased opportunity for individualized instruction and the chance to know each child as an individual, fewer behavioral problems, less bureaucracy, greater student and parent participation in schools and school activities, greater heterogeneity of the social class, and a sense of greater teacher impact on the curriculum (Miller and Sidebottom, 1985, p. 3 and Swift, 1984, p. 1). Teachers in these schools often have more opportunities to participate in the decision-making aspects of school site management than their peers in larger districts or those with greater centralization of administrative functions (Muse and Thomas, 1992, p. 56). In fact, rural and small schools already include many of the characteristics identified in the "effective schools" research including "...interpersonal relationships, shared expectations, and a safe learning environment..." (Nachtigal, 1992, p. 76). Another possible benefit of working in a closely-knit community is that the teacher can utilize community members to help make learning activities more "real" by engaging students in studying their community. For example, one excellent program is the Foxfire curriculum designed by Eliot Wigginton in which students in high school English classes publish a magazine based on the history and culture of the community in which the school is located. (Note: for more information, please refer to Once A Shining Moment, by Eliot Wigginton.)

Where can you find qualified teachers? Schmuck and Schmuck interviewed 119 teachers in 80 rural schools and found that over 90% had been raised in communities very close to where they were now teaching (Schmuck & Schmuck, 1989). Muse and Thomas suggest that "knowing that teachers with rural ties are more likely to come to rural communities and stay, rural districts should concentrate on attracting teachers with rural backgrounds..." (Muse and Thomas, 1992, p. 59). The term "growing your own" is sometimes used in relation to recruiting teachers and means that districts should look within their classified employee and volunteer groups for potential teachers. Districts should try to offer incentives to these classified, volunteer, and graduate groups to assist them in obtaining the needed education; this will not only aid these people to become teachers but will also build a stronger allegiance to your district. Successful programs are in place at the University of Portland, the University of Utah.
Utah State University and many other institutions. In Utah State's pilot program, the participants were classified employees (instructional assistants) who continued to work during the week and attended class on Saturdays. The university delivered classes on-site so participants would not have to spend time traveling to the campus. The program was carefully evaluated and found to be highly successful: over 50% of the participants were still teaching in the district and others had relocated but were still teaching. The university recommended that in future programs based on this model, the districts and institution enter into a written agreement specifying the number of participants, who is responsible for the selection process, who will pay for materials, building costs, etc. so as to avoid difficulties after the program is begun (Willis and Henderson, 1989, p. 2).

Other effective "grow your own" strategies are to sponsor Future Teachers of America clubs and to implement a career education program within the district to encourage students to consider teaching as a career and to think seriously about returning to their home communities once they have received their credentials.

INDUCTION

In an effective system, the process of induction should begin the moment the new teacher is hired. Induction is the term used to describe all the processes through which a new teacher is introduced to the policies and culture of the school district, including the individual school, the staff, curriculum, and the community. A review of the literature shows induction in rural and small schools poses particular problems. "...Induction in rural and small school systems is not only to the system and school, but also to the rural area itself; not only to the school, but to each course...and to the students, etc." (Hare, 1989, pp. 9-11). "...Getting acquainted may also mean the beginning of life in a fishbowl as small town citizens often pay closer attention to the conduct of each other -- especially persons such as teachers -- than in large urban areas where anonymity is practically guaranteed" (Muse and Thomas, 1992, p. 57).

How can a district design appropriate induction processes? The literature describes the methods most commonly used. "...Making the new teacher feel a part of the educational team and part of the community is crucial to that teacher's success" (Muse and Thomas, 1992, p. 59). Administrators report they assist beginning teachers in rural schools by offering a pre-school year orientation program, by pairing the new teacher with a master teacher, by assigning the new teacher an out of class project that requires
interaction with other school personnel, and by making regular visits to the beginning teacher's classroom (Miller and Sidebottom, 1985, p. 26). Researchers also recommend that these problems may be eased by increasing inservice practices, initially reducing teaching and other instructional responsibilities and increasing time for planning and organizing instruction, providing opportunities to observe the teaching of more experienced colleagues, and offering opportunities for beginning teachers to interact with one another (Swift, 1984, p. 2). Rosenholtz summarizes the literature with these ten components essential for successful induction of new teachers:

1) Carefully selected initial assignments which avoid placing the new teacher in the most difficult schools nor with the most difficult situations.
2) Opportunities to participate in decision-making coupled with autonomy in many classroom choices.
3) Clearly set administrative goals.
4) Regular, clear feedback and specific suggestions for improvement,
5) Encouragement from administrators and colleagues.
6) A non-threatening environment which encourages questions.
7) Opportunities for discussion with experienced colleagues.
8) Encouragement to experiment and discuss the results with colleagues.
9) Clearly set school rules for student behavior.
10) Opportunities to interact with parents

Most educators would agree that mentoring programs are effective in helping new teachers through the induction period. Mentoring programs vary significantly, but Bey suggested a common definition. "Mentoring is an old practice of experienced teachers passing on their expertise and wisdom to new colleagues faced with the challenges associated with the initial phase of teaching" (Bey, 1990). "Collegial mentoring arrangements -- even if by telephone when distances are great -- can mean the difference between feelings of acceptance and isolation for new teachers" (Muse and Thomas, 1992, p. 59).
While no commonly accepted formal operational definition of mentoring exists, educators do agree on one main element: mentoring programs must exist separately from evaluative programs.

**RETENTION**

Small and rural school districts also report difficulty in retaining qualified teachers. Included in the literature are suggestions for several long term strategies including reimbursement of dues for professional association memberships, opportunities for sabbatical and faculty exchange programs, reimbursement of tuition, and provision of release time for travel to professional meetings. Suggestions for inservice and staff development activities in small or rural schools include the use of alternative instructional formats such as cable and 2-way television systems and correspondence courses and the development of regional inservice education centers. Another suggestion is to give salary increments for teaching assignments which require multiple subject areas or grade level responsibilities (Swift, 1984, p. 2).

**REFERENCES**


A PARTNERSHIP IN TRAINING: A DISTANCE LEARNING APPROACH TO IN-SERVICE TRAINING IN RURAL COMMUNITIES

Affecting change in special and general education will require new approaches to offering in-service, continuing education coursework to teachers who are already working in public schools. Teachers today are facing an increasing array of changes and challenges in their professional responsibilities that makes it essential for them to have easy and ongoing access to training. Distance education offers a very viable and exciting means of providing this training especially for teachers in rural communities (Knapczyk, 1993; Knapczyk, Brush, Rodes, & Marche', 1993). But discussions of distance education too often focus on rapidly developing high-end technologies, with their astonishing promise for future communication -- and their even more astonishing price tags. In the excitement over new technological achievements, we often lose sight of the more practical issue of how to develop a workable model for distance education in the present times of tight budgets and limited resources. We may forget that the quality of distance education depends less on the sophistication of the technology employed than on the skillful harnessing of available resources -- both technical and human (Keegan, 1990). To be successful, in-service instruction must be based on the practical application of technology to teacher education, and on the partnerships that universities and school corporations can form in offering field-based courses and practicum experiences (Evans & Nation, 1989; Keegan, 1990; Smith & Kelly, 1987; Verduin & Clark, 1991).

Description of Indiana University's Program

For the past five years, Indiana University has been offering in-service coursework through distance education and interactive communication technology at an expense comparable to the cost of traditional campus-based instruction (Knapczyk, Brush, Champion, Hubbard, & Rodes, 1992). The teacher education program at Indiana University arose out of a partnership between the university and several school districts. The teachers take part in the training as members of school-based collaborative groups and they use the concepts and practices presented in the courses directly in their own classroom and school situations.

When we designed the field-based program at Indiana University, we combined traditional college courses and on-site practica into one unified and comprehensive training experience. The teachers implement the theoretical concepts discussed in class immediately in their own professional settings, and use the information to plan teaching lessons and behavioral
The course instructors design their presentations to encourage collaboration between students during the class sessions, and structure practicum projects that promote continued interactions among the students after the meetings.

The combination of distance education and communication technology allows teachers to obtain the coursework without traveling to the university. However, unlike in-service workshops, the program continues for an entire school year and teachers have ongoing access to their instructors through the interactive communication technology. Thus, the program ensures that teachers do not feel isolated or "cut off" from either their instructors or their colleagues after the individual training sessions are completed. In the next sections, we will discuss some guidelines, drawn from our experiences, for choosing appropriate technology and for structuring field-based training.

**A low-cost option for distance education technology**

The cost of distance education is a major consideration in selecting an approach to use, because of the limited resources universities and school corporations have for field-based teacher preparation. In our program we use basic, low-cost, reliable technologies to deliver weekly classes to remote sites, typically in local high school libraries or meeting areas. Each hardware and software component fulfills specific roles in course delivery. We will discuss each element in turn:

**Speaker phones** provide our basic communications link with teachers during the class sessions. Speaker phones are relatively inexpensive and can be used virtually anywhere, and the teachers adapt quite readily to them because they are so familiar. We use the AT&T Quorum telephone system, which supports an excellent omni-directional microphone and a fairly clear speaker, two elements that are crucial for effective communication. While ordinary speaker phones are sufficient for instructing small groups, high-quality microphones and speakers enable us to teach twenty or more teachers in a session. At the originating site, we use operator-style headsets to increase the clarity of the presentations.

**Facsimile machines** permit continuous access and rapid feedback between university instructors and teachers. The teachers complete ongoing practicum work each week, and fax their worksheets to the university before the next class. They also send notes if they need clarification or have special difficulties. The instructors return feedback to the teachers' work sites by fax, enabling the teachers to put any advice or direction into practice immediately. The fax machines are also used at class time to transmit supplemental course materials, instructions for in-class activities, attendance lists and other documents to and from the class site.

**Audiographics** supplies a visual component during the class. Audiographics is an interactive computer-based technology that
allows users to share text and graphic images, and annotate images displayed on monitors or projection devices (Knapczyk, 1990). The system we use consists of the following:

* MacIntosh LCII computers at the university and remote sites,
* 9600 bds modems operating over standard telephone lines,
* An n-View LCD overhead projector at each remote site.

We use the computers as a two-way overhead projector or chalkboard to illustrate our presentations, to emphasize important points in a discussion, and to develop an interactive exchange with the teachers at the remote site. To accomplish this, the system employs the following software:

* AppleTalk Remote Access, to establish the communication link between computers through the modems,
* MacIntosh Multipoint Interactive Conferencing Application (MacMICA), to create a shared "electronic chalkboard" between the sites,
* Timbuktu, to control the remote computer and to access and configure software applications,
* SuperPaint, to create PCX or PICT images of course material, such as overheads, that are pre-shipped to the remote sites before class time.

This combination of technologies and software allows us to complete any needed class preparation at the origination and remote sites. The instructors and students can simultaneously speak with one another, and see and annotate graphic images of course materials. This entire system can be purchased for about $2500 per site, but most universities and many school corporations already have some of the major components. The only additional costs for operating the system are monthly telephone charges. Comparable software configurations can also be purchased for MS-DOS users.

**Tips for technology selection**

We have found that the choice of technologies to develop and deliver training through distance education should take into account the following principles:

**Use what is available.** In the rush to embrace new technologies, educators can easily overlook the usefulness of more commonplace inventions. We discovered, for example, that the speaker phones and fax machines are the most powerful and versatile equipment we have. They can be set up almost anywhere and be used at any time, and they allow a greater and more free-flowing exchange of information, ideas and advice than is typical even in a normal campus class. The fax allows us to send backup copies of class materials and overheads to our sites in case the computer link breaks down during class. Before investing in high-end technologies, then, it is important to explore existing or readily available equipment such as fax machines and telephones.
Choose reliability over sophistication. We also discovered that reliability and consistency are far more crucial than impressive effects when delivering distance instruction. Typically, the most elaborate and sophisticated technologies we have used are the ones most prone to bugs and breakdowns that can quickly erode the confidence and morale of the teachers on site. For example, MacMica is an invaluable communications tool because it is simple to operate and seldom "crashes", even over the primitive telephone lines and switching devices that often exist in rural settings. These features make it far more valuable than other more powerful products that tend to be more finicky.

Have the goals of the program drive decisions about technology. Before investing in any equipment, it is important to have a very clear idea of what the instruction is to accomplish, what materials will be used, where class sessions will be delivered, what resources are available in the field, and who will be included in the training. Considering these issues carefully before deciding about technology will save a great deal of time and money. In fact, program development is by far the most important part of creating a distance education course, even when working under a generous budget. Establishing clear goals for the program, and treating technological questions as a subordinate issue, ensures that the equipment used and the way in which it is employed will be well suited to the instructors' and teachers' needs.

General principles of program development
Distance education technologies provide the tools for instruction that can be used in many ways and be adapted to suit a wide variety of demands, constraints and circumstances. Instructors and program developers should, however, first decide what outcomes, goals, and objectives they wish to accomplish in the program and coursework. The following principles, can be used as general guidelines for structuring coursework using distance education (Helge, 1984; Keegan, 1990; Knapczyk, 1991; Treadway, 1984). The coursework should:
* Offer training that is practical, useful, and oriented to job responsibilities,
* Be flexible and address a wide range of individual needs
* Assist trainees in the shared development of their own skills and promote ownership in the program,
* Offer opportunities to practice and apply skills in realistic circumstances,
* Utilize local resources and expertise in program planning and delivery, and
* Employ technology effectively and encourage various modes of participation.

These principles can create many unique challenges for course instructors who work with in-service teachers. They also represent unique opportunities, if properly planned for. In the next section, we will discuss three areas in which distance education offers distinct advantages over traditional instruction
for addressing the principles described above: (a) promoting ownership through on-site coordination, (b) promoting application of training to on-the-job situations, (c) encouraging collaboration.

Promoting ownership through on-site coordination

One challenge of distance education is handling the logistical and instructional tasks that arise in any normal class session. We have found that these tasks are best carried out by the teachers themselves. Adult learners bring a wealth of professional skill and experience with them to their classes. Properly structured, distance education can capitalize on these experiences in a manner that facilitates the mechanics of course delivery, enriches the content and teaching interactions of the class sessions, and more closely involves teachers in their professional development.

To accomplish these aims, we have two different teachers serve as coordinators for each session. One person coordinates the technical set-up of the class by assembling the equipment for class and establishing the voice and computer link-up. As the year progresses, each teacher learns about the technology and becomes comfortable with its operation, thus removing the initial apprehension teachers often have about participating in a distance education activity.

The other coordinator oversees the instructional aspects of the class sessions. This includes passing out papers and working out seating arrangements for small group activities, as well as assisting with the actual course instruction. We prepare the coordinators for these responsibilities by talking with them before the class sessions to explain the topics that will be covered, outline the roles they will serve, and suggest methods for carrying out the duties. This preparation enables coordinators to oversee class discussions, re-direct questions back to the group, present examples of course concepts, and explain how procedures and techniques can be used in situations that all the teachers are familiar with. The on-site coordinators personalize the class activities and allow for a fuller consideration of the concepts and techniques covered in the course, thus shifting the responsibility and ownership of the instruction onto the teachers themselves.

Promoting application of instruction to on-the-job situations

In many in-service programs, teachers have very few opportunities to apply the concepts they learn to actual teaching situations until much later in a practicum or student teaching experience. However, learning under "artificial" circumstances is often not very effective because teachers typically have considerable difficulty transferring abstract concepts to real-life job situations.
We offer training for one to two years, and we show the teachers how to fully integrate theoretical concepts into teaching practices that suit their job situations. A prime benefit of providing instruction over a long period is that it allows us to create opportunities for the teachers to practice new methods, to use them in combination with other methods, and to adapt them to fit a variety of teaching contexts and situations. Thus, as teachers learn new teaching skills, they also learn how to put them together with the skills they already have so as to form increasingly complex and unified teaching behavior. The extended training approach allows us to tie the concepts covered in the program directly to the teachers' existing knowledge and skill base. At the same time, the instructors learn increasingly more about the teachers' particular circumstances, and can access technology that permits easy and frequent communication with each teacher.

Encouraging collaboration among teachers

Research has repeatedly shown the value of within-school professional team building and collaboration among teachers (e.g., Thousand & Villa, 1989). However, in traditional models of teacher preparation, strategies for collaboration are usually not built into the instruction. In fact, the design of many teacher education courses discourages, rather then encourages, collaboration among students (Resnick, 1987).

Because our program is field-based, we can attract groups of teachers from the same school or school district, and can incorporate collaborative team building techniques into the very structure of the coursework. The coursework encourages teachers to share their ideas and build closer professional relationships with one another. Thus, they work with expert mentors that include both the university instructors and other teachers in their school building. We use a variety of in-class activities in which teachers share their experiences and help one another apply and adapt the course concepts to their teaching circumstances.

Out-of-class projects are assigned on a collaborative basis so as to continue this professional dialogue about course topics. The students meet in school-based groups to discuss the concepts presented in the class sessions. Then, they work together to prepare lessons and interventions for the children in their classrooms. By working together, the teachers can access a wealth of expertise, resources, and information that would otherwise remain untapped. Furthermore, after the year-long training is completed, the collaborative teams often remain intact, thus providing the teachers with a ongoing peer support structure.

Summary

The key to preparing the teachers of today to carry out their professional responsibilities is not necessarily found in high-priced technologies, but rather in developing a new level of
cooperation between universities and public schools and exploring new ways to offer coursework. Even at a low cost, distance education and communication technology can help to give teachers access to current information on teaching practices and provide a catalyst for improving the quality of teacher preparation and educational programs for children.
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CAREER LADDER APPROACH TO TRAINING FOR
COMMUNITY FACILITIES PERSONNEL AND PARALEGAL STAFF
IN THE STATE OF NORTH DAKOTA

INTRODUCTION

Ten years have passed since the initiation of the North Dakota Statewide MR/DD Facility Staff Training Program. Since 1983, the training program has experienced a steady growth, maturing and evolving to keep pace with the expansion and training needs of the state's community based programs and services. Using a career ladder approach, over 10,000 staff from agencies across the state have received training. Critical to the program's success has been the cooperative relationships among the Department of Human Services, Minot State University, and community providers. State certified regional trainers employed by local providers are linked to the University and have helped the system remain accountable to changing agency needs.

Rural Delivery System

North Dakota has a land mass of 70,665 square miles and a population of 625,000--with a population density of approximately 9 persons per square mile. Distances between cities are vast. Developmental disability facilities are scattered throughout the state. The training program is a model that uniquely meets the needs of rural states. It provides a "circuit rider", taking technical assistance to the designated D.D. regional trainers working with facility staff dispersed throughout the state. The training program, with its career ladder options, is available and accessible to every agency and every employee providing services to individuals with developmental disabilities within the state of North Dakota.
BRIEF DESCRIPTION OF THE PROGRAM

Full-time direct service staff are required to demonstrate knowledge and skills in topic areas addressed in 13 training modules. These skills are taught at provider sites by state certified regional trainers employed by the service providers. Full time staff must complete the required training within 18-24 months to remain employed with the agency. Providers are encouraged to require the same of part-time staff. In addition, agencies and individual staff have the option of selecting from 20 additional modules dealing with aging issues, communication, leisure, behavior management, basic health and working with families.

The training program offers a seven step professional development sequence for career advancement. The steps include an entry level orientation, “position based competency training”, a Certificate of Completion of required training modules, Advanced Certification, an Associate of Arts degree in Developmental Disabilities, a Bachelor of Science degree in Mental Retardation (Non-Teaching), and a Master of Science degree in Special Education.

Learning options include formal instruction, on-site demonstration, mentoring and self-study with or without discussion group participation. Staff may “test out” of individual modules by demonstration of required competencies.

Key program elements include comprehensive but flexible training materials, a statewide system of individual training records, state standards and certification for direct service staff training, a career training sequence leading to academic degrees, and program consistency through time and across the state.

RESULTS

Certified Staff Members

Since the initiation of the training program in July, 1983; approximately 10,007 staff members were enrolled and received training. As of June 30, 1993, 1,887 staff members have been certified. These individuals have successfully completed the competencies established by the State Council on Developmental Disabilities which include 13 modules and a series of
supervised field experiences. From the 1,887 who received certification, 229 were certified during the 1992-1993 academic year.

**Advanced Certification**

Minot State University has established an advanced certification program for those staff members of agency organizations who have already acquired the certificate of completion. These individuals now have the option to pursue the advanced certification program. The program consists of 20 modules dealing with the aging issues, communication, leisure/recreation, behavior intervention, sexuality and nutrition as well as a number of additional practica. Staff members who successfully complete the advanced certification requirements are issued the advanced certificate.

During the 1992-1993 academic year, 17 staff members completed advanced certification requirements and were issued a certificate.

**Associate of Arts Degree**

The Associate of Arts degree in Developmental Disabilities is an additional component of the training program. Minot State University awards the two year degree upon satisfactory completion of the designated 27 SHs of developmental disabilities course work and the designated 38 SHs of general education requirements. The AA degree course work is available only to personnel employed in approved residential and day programs serving individuals with mental retardation/developmental disabilities.

The purpose of the Associate of Arts degree is to provide the opportunity for professional growth and career advancement for high school graduates who are employed in agencies serving persons with mental retardation/developmental disabilities.

Since the initiation of the training program in 1983, 82 individuals have successfully completed the degree requirements. Of those individuals, two completed the degree during the period of 1992-1993.
Survey of Graduates

A number of individuals (n=21) who completed the requirements for the Associate of Arts degree in Developmental Disabilities were surveyed. (1994)

They were asked to respond to a number of questions. Some of the questions and answers are listed below:

Why did you choose to pursue the Associate of Arts degree in Developmental Disabilities?

• The opportunity was so convenient that I felt I could not pass it up.
• Having the classes offered right at my place of employment was really a big incentive.
• The price per credit was so low it was irresistible.
• It was a wonderful opportunity to get a degree. Many business do not offer this.
• The training helped me as a case manager. It provided very good practical information. It updated my previous course work and made my knowledge more current and accurate.
• It made me more qualified in the field.
• I did not have to drive a long distance.
• It was a validation of my 12 years of experience in the field of developmental disabilities.
• It increased my knowledge and improved my job performance.

How did the degree help you in your profession?

• It allowed me to keep my job.
• The training applied directly to the daily requirements of my job.
• It gave me skills to assist the population I serve and confidence to pursue a higher degree.
• The education has been very valuable. I've been assigned more job responsibilities.
• It provided me with a good foundation and I have been given several promotions since I completed the Associate of Arts degree.
• It opened the door to three different jobs in three different cities in the state.
• The training program made me better prepared for D.D. services than most of the 60 providers I have worked with in Alaska. I wish they had the same program here in Alaska.
• I got hooked on increasing my educational base. I eventually completed an endorsement in regular education 1-8 plus a Masters Degree in Severe and Multiple Handicaps.
• It built in more self-confidence and reinforced my philosophy of education.
• The career ladder approach encourages staff members to learn more about their jobs. As staff members achieved levels of training, I witnessed a growth in self-esteem. They began setting goals for themselves. They believed that they could learn and grow.

The 21 respondents when asked to rate the career ladder approach of training on a scale of 1-5, with 1 being poorly designed and 5 very well designed, rated the program with a mean of 4.11.

**North Dakota Paraeducator Training Project**

Armed with the successful model utilized in the community facilities programs, the North Dakota Center for Disabilities (NDCD), a University Affiliated Program (UAP), expanded and modified the program to address the needs of paraeducators. A three year federal grant was initiated in October of 1992 to design, implement and deliver comprehensive training to ND’s 850 special education paraeducators. The program is a collaborative effort between The ND Department of Public Instruction (DPI), the state’s 31 special education units, Minot State University (MSU) and NDCD. The program is based out of MSU, which serves as the coordinating agent for curriculum development, training of adjunct instructors, and provision of college credit for individuals undergoing training.

Research indicated that paraeducator usage in the state was increasing, especially in the special education field. Reasons for the increase included factors associated with the rural nature of the state including: lack of certified personnel in some special education areas, lack of resources for more professional educators, and the need for increased individual programming for students with more severe disabilities who were entering the public school setting in increasing numbers.
In 1991, North Dakota Paraeducator Training Project personnel conducted a needs assessment survey in the area of paraeducator training. Respondents indicated a need, and desire, for further training to be conducted on an on-going basis, close to the communities in which the paraeducators were employed, (i.e. field based training) for which there were opportunities for advancement (career ladder).

In the project’s first year, four pilot sites were selected for training and curriculum development was initiated. The second year of the project saw an additional 14 special education units brought into the program, with the remaining 13 units coming on board in the third year. The collaborative effort was highlighted by the establishment of a curriculum review committee consisting of representatives from the four pilot sites, the DPI, and North Dakota Paraeducator Training Project (NDPTP) personnel. The committee aids in the production, modification and adaptation of available training materials, as well as development of new training materials specifically geared towards the paraeducator audience.

A Consumer Advisory Council has also been active within the project. A group of five individuals meet quarterly to discuss the project’s goals, objectives and accomplishments with team personnel. These individuals are themselves disabled, or family members of individuals with disabilities and offer a unique perspective to the project.

**Curriculum Development/Career Ladder**

The areas of training for the program were developed according to the surveyed needs of program participants. Each paraeducator is not expected to undergo all areas of instruction. The initial training has been placed into a two tier system. Tier one modules are broad based and introductory in nature, and as such are required by DPI for all paraeducators. The four modules that comprise the first step, or the certification level in the career ladder associated with the program, have been placed into a three semester hour class: Paraeducator Orientation to Special Education. The four include:

- Roles and Responsibilities of Paraeducators
- Introduction to Disabilities and Effective Instruction
- Serving Students with Disabilities in Integrated Settings, and
- Strengthening Behavior
The remaining training modules are classified as tier two modules. These modules are more specifically geared toward areas in which paraeducators provide aid to students and other educational personnel. The next level on the career ladder, advanced certification, is attained when paraeducators take an additional 20 clock hours of training (four to five additional modules). These include:

Sp. Ed. 101 - Introduction to Special Education
- Issues in Early Childhood Education
- Foundation Principles of Value Based Services
- The Team Approach to Individual Education Plans
- Collaboration and Teaming

Sp. Ed. 111 - Health Care and Paraeducator's Responsibilities #1
- Medication Training
- C.P.R. Certification
- First Aid Certification
- Signs and Symptoms of Illness
- Control of Infection and Communicable Diseases

Sp. Ed. 112 - Health Care and Paraeducator's Responsibilities #2
- Epilepsy and Seizure Control
- Positioning, Turning and Transferring
- Oral Hygiene and Dental Care
- Nutrition for Everyday Life
- Feeding Techniques

Sp. Ed. 120 - Introduction to Behavior Management
- Behavior Management
- Observation Techniques
- Writing Behavioral Objectives and Measuring Behavior

Sp. Ed. 130 - Organization of Leisure Time and Playground Supervision
- Recreation and Leisure Training
- Playground Integration

Sp. Ed. 140 - Human Development
- Human Development I & II
Sp. Ed. 221 - Techniques of Effective Education Management
  • Introduction of Assessment and Setting Goals
  • Achieving Goals and Objectives
  • Effective Instructional Practices
  • Job Coaching/Task Analysis

Sp. Ed. 250 - Developing Communication Skills
  • Interpersonal Communication
  • The Framework of Interaction and Communication
  • Recognizing and Responding to Many Forms of Communication
  • Increasing Understanding
  • Increasing Communication

Sp. Ed. 275 - Effective Transition from School to Work/Adult Services
  • Historical and Philosophical Aspects of Transition
  • Regulations and Policies for Transition
  • Service Options and Programs
  • Methods for Effective Transition
  • Role of Parents, Schools and Adult Agencies in Transition

As new areas for training come into existence, new modules and classes will be added. The curriculum is a growing entity.

The training is available to all paraeducators in the state. An additional incentive for paraeducators undergoing training is the opportunity to receive undergraduate college credit once competency is achieved in each course. The paraeducator can receive two or three college credits for a $30 recording fee. Some of these credits can be used toward an Associate of Arts and/or Bachelor of Science (non-teaching) degree. Additional course work is needed however, in the areas of General Education and Special Education to attain the degree(s). The college credit option has also been approved by DPI for recertification/relicensure of those paraeducators with teaching degrees. The college credit is strictly optional, but has been seen as an outstanding benefit for those wishing to continue their education.

The diversity of the individual special education units in the state (size, number of paraeducators, distance between schools, etc.) required that a number of different options be made available for delivery of instruction.
The modules can be presented for instruction in a variety of ways to meet the needs of the various units and the individual paraeducators. Large group instruction, small group format, on-the-job demonstrations, or self-instructional options are all available.

Adjunct instructors were selected by the individual special education units based on experience in the field and ability to work with adults. These individuals received training in materials and methodologies of the project, and then began providing instruction and coordination in their individual units with assistance from NDPTP personnel. Project personnel have tried to accommodate the adjunct instructor's needs by providing comprehensive materials and instructional aids for each module.

The modules are written at an average reading level, with an emphasis on detailed explanations of novel concepts introduced by the modules. The modules are split into lessons, with objectives, feedback exercises and answer keys to guide self-instruction. Overhead transparency masters and paraeducator notes are also developed for each module, along with a list of various videotaped materials that may enhance the information contained in the module.

**Evaluation/Record Keeping**

Evaluation of competency is achieved through the pre- and posttests which accompany each module. The pretest will inform the paraeducators on what competencies are expected on the posttest and inform the adjunct instructors on which concepts need more attention during the presentation. It also allows those paraeducators with previous experience and training to test out of the module by achieving competency with an 85% score or better. The tests are fairly objective in nature (true/false, multiple choice, matching, and brief list and define-type questions).

After the pretest and presentations are completed, the paraeducators will be able to study the modules and complete the feedback exercises in order to prepare for the posttest. If paraeducators do not achieve competency on the posttest, 85% or better, they may retake the posttest at a later time.

NDPTP personnel are keeping track of the training undergone by each paraeducator in each special education unit. This information will be
shared with DPI for paraeducator funding purposes. DPI has offered grant monies to the individual units with which to carry out training activities. These funds have been used to pay adjunct instructors and paraeducators for release time or salary, reproduce materials for training and other incidental expenses. DPI has also indicated that at the end of the three year grant period, they will begin reimbursing special education units for paraeducators based on the amount of training they have undergone.

**Summary/Future**

The project is proving to be extremely beneficial for the delivery of training to special education paraeducators in rural North Dakota. Many aspects associated with the project are seen as vital to the ongoing success of this project, as well as to replications that may be attempted. First, it is important to have a lead agency that has the resources needed to make a program such as this operational. The NDCCD has personnel and contacts within the state that allow it to access resources as needed for everything from curriculum development to acceptance of courses for college credit.

A collaborative relationship must exist between the agencies and personnel in order to go beyond the initial difficulties associated with a project of this nature. Collaborative relationships must also be established within each special education unit as well. Due to the vast distances between schools in each unit, special education teachers and office staff in each school should be enlisted to help paraeducators when they have questions, to monitor pre and posttests, as well as other incidental duties that will enable the project to keep moving forward. If the resources are not available to develop curriculum materials, there are many excellent materials available for paraeducator training at reasonable prices.

Our vision for the future is to continue the training process for paraeducators in the state of North Dakota, and to continue developing materials that are appropriate for the expanding population of educational personnel working with students in the schools. People always comment that this information would be useful for regular education teachers and paraeducators too. NDPTP personnel are presently looking for funding opportunities or options to pursue this venture.
Interpersonal communication must be considered an extremely complex phenomenon in which different "levels of reality" are simultaneously present (Ricci, 1986). How these levels of reality develop and come into communicative play directly pertains to, if not defines, the aspects of pragmatic language. When breakdowns in interpersonal communication occur, it has been considered expedient to focus attention on pragmatic aspects of language usually involving only two persons as the grounding interactive framework.

An alternative model of communication emanating from the study of family interaction dynamics views interaction from a systems perspective (Galvin & Brommel, cited in Lane & Molyneaux, 1992) which sees communication affecting relationships which affects the communication that occurs. This reciprocal ripple effect has also been documented in educational systems' activities as student special needs committees as well (Gerke, 1993; Gilliam, 1979; Pfeiffer, 1980; Yoshida, Fenton, Maxwell, & Kaufman, 1978). Implicit in these findings and acknowledging the everyday experiences of committees or teams at work for a plethora of reasons across a variety of settings, it appears particularly salient to evaluate team interaction from more than a grounding dyadic perspective. Ricci (1986) believes that in team interaction, the receiver is not well defined and by focusing on the two who appear to be the main communicators (the apparent source and receiver), we risk slipping into dyadic analysis. This tends to not only negate the interconnected strands of exchange occurring between more than two persons at a time but also dismisses the team as having a life of its own and functioning as the receiver itself. Consequently, team synergy, which is an essential characteristic of effective transdisciplinary teams (TDT's) is not established.

Research has supported the contention that a team makes more accurate decisions than do individuals acting alone (Bailey, 1984; Pfeiffer, 1982; Vautour cited in Pfeiffer, 1980) and regulations require that evaluation and placement procedures related to the Individuals with Disabilities in Education Act be made by an interprofessional team or group of persons. Problems inherent in the teaming process continue to remain unsolved. Increasing parental and regular education involvement in teaming (Pfeiffer, 1980); the lack of consultative/collaborative in-house team training practices (Bailey, 1984; Fleming & Fleming, 1983; Huebner & Sachs-Wise, 1992; Pfeiffer, 1980); and a persistent shortage and low retention rate of special education and support personnel in rural education (Helge, 1981, 1983, 1985; Theobald, 1991) are the bane of professional educators in the field.

At the preservice and training levels, Roth (1988) has made an appeal to university training programs to provide educators at the preservice level to use and incorporate collaborative approaches. He states that "teacher education faculty have recently recognized the need for interdisciplinary/transdisciplinary preservice training. Few models have been presented that are workable within the traditionally autonomous university department structure." (p.22). Implicit in resolving these concerns, university faculty must actively shift both vertically and horizontally, redefining professional turf boundaries while changing stratified teaching parameters considered sacrosanct, immutable and insular (Pfeiffer, 1980; Westby, in press).
The lack of a conceptual team model for underpinning the analysis of interaction to improve team functioning (Bailey, 1984), the paucity of methods developed to analyze complex pragmatic interactional processes within dysfunctional systems (Bailey, 1984; Ricci, 1986), the value and clarification of critical phases within an interprofessional - transdisciplinary teaming process (Bailey, 1984; Lyon & Lyon, 1980; and Maher & Hawryluk, 1983), and the paucity of specific team training curricular models (Bailey, 1984; Gerke, 1992) are a number of burgeoning problems that continue to adversely affect team functioning. These problems pose questions concerning the credibility and practicality of university training programs, which seemingly by omission, maybe perpetuating chronic problems in the field. These unresolved teaming problems put rural educators in double jeopardy. To frequently, rural teachers are required to employ a wider range of skills than their formal training had encompassed to meet the needs of children whom they serve (Helge, 1981, 1983; Marrs, 1984).

Universities offer teacher education programs through a maze of state regulations for program approval and teacher certification that are always reflective of current and past practices in education, not future trends or directions (Lilly, 1989). Consequently, university training programs tend to follow rather than lead the field of practice in practice. After an extensive review of literature on one aspect of pragmatic language, the semantics of prejudice on campus at all levels and departments, Westby (in press) precipitated by on campus events, concludes the egalitarian assumption of universities as an arena for diverse ideas and cultural expansion is inaccurate, for faculty and students are seldom prepared to discuss issues of prejudice and discrimination, a matter of different realities in an interactive organizational culture and communication context.

In addition, Westby asserts a need for a responsible curriculum to embrace prejudicial issues and enable students to deal more effectively with these issues in their workplace, for as she came to understand, it is difficult to recognize and identify subtle instances of prejudice in social interactions particularly in the rapid and complex dialogue characteristic of teams. A precondition for self-corrective behavior to occur is the participant's knowledge base being beyond a simple awareness which, to a large degree, shifts responsibility to professional trainers and the integrity and comprehensiveness of their training program.

This is especially the case then, as it pertains to a university faculty's and student's interprofessional behavior and the study of the interaction teaming component of the overall transdisciplinary curricular program. Pfeiffer (1980) and Huebner and Sachs Wise (1992) suggest that students of educational administration, counseling, regular and special education, school psychology, and social work, need to be exposed to professors who model cooperation and interchange among disciplines, as well as to be provided with courses and field experiences that focus on interprofessional functioning. Beginning teachers would be in a better position to make appropriate decisions about the values indigenous to working in a rural culture given at least a modicum academic exposure.

While literature on interprofessional teaming in relation to traditional group processing techniques which focuses almost exclusively on relational team aspects and intrapersonal problem-solving is relatively abundant (Blumberg, 1974; Sadker & Sadker, cited in Lane & Molyneaux, 1992; Westby, cited in Clark, in press), little research has been offered on the pragmatics of analyzing the various developmental stages of effective teaming emphasizing interprofessional and transdisciplinary strategies for team self-improvement particularly at teacher training levels. Gerke (1993) has developed a tri-semester curricular program that incorporates individual and team development and respective intervention strategies, emphasizing role release across a variety of learning scenarios and applicability in several fields (Appendices. A, & B.).
Just as teams are mandated to individualize educational plans, we should also seek to individualize efforts to facilitate positive, effective, and efficient team functioning. The adoption of a proposed teaming model together with the interaction evaluation method based on an expanded communication model of pragmatic language inherent in teams looms critical and timely. This is a comprehensive TDT curricular model that offers an entrance level plan to develop team maintenance, as well as building substantive and procedural team development activities.

The core of the teaming model in practice is self development as a team player. Awareness, acceptance, and an action plan to effect change towards teaming as a culture is the next step in team development. When a team functions as a single entity, it has reached a level known as team synergy, i.e., no one member is as effective as the entire team effort in a problem-solving situation. Exploration of organizational cultures include the immediate life context and/or community setting as a component of continuous study in the second seminar's sequence with additional work on mediation and conflict management. The third seminar focuses primarily on application of TDT in the field as defined by respective teams. The underlying purpose of this seminar is to walk the talk.

One of the problems in both individual and team development is the selecting instrumentation / methodology for synthesizing information across self, team interaction, and content as the team’s task focal point. Individual and team development are a composite of the work of Tuckman and Jensen's (1977) stages of forming, storming, norming, and performing, adaptation’s of Beckhart's (1972) eight stages model for team building, Bailey's (1984) tri-axial developmental team model, and Lafferty's (1989) Human Synergistic (HI) Team building model and materials. There are a variety of individual and team building programs available, however, the Human Synergistic materials offered a simple, consistent, sensible, operational orientation. The HI system integrates self-improvement and team building activities/analysis, organizational culture, and conflict management activities and analysis, across focal problem-solving scenarios. In addition these materials include a prescriptive methodology to affect individual, team, and organizational change.

The key and distinguishing characteristics of the transdisciplinary teaming model are collaboration and role release. These concepts are operationalized in the TDT tri-semester training model using the HI materials on a continuum from self to team synergy. Specifically, role release presents team members with an opportunity to develop assessment and intervention knowledge, skills, and competencies through a reciprocal learning process established by the team. Essentially, role release taps expertise, i.e., general knowledge, informational skills, and performance competencies from each team member.

The curricular TDT training model allows for flexibility in specific task activities. In order to build general knowledge (GI), increase critical content (task) information skills (IS), and accomplish performance competencies (PC) (to affect role release) simply chose content areas that have been enumerated in literature and in part above as chronically problematic to rural settings. An outstanding resource is the publication of the American Council on Rural Special Education, the Rural Special Education Quarterly (RSEQ).

Initially, the articles in the RSEQ promote cultural awareness of the rural community and provide the data base for GI, IS, and PC's while building teaming skills simultaneously. A perusal of several of the journals will provide you with a tentative list of articles from which information could be formatted to utilize in a team building scenario.
Examples: From respective issues of the RSEQ.


Use the 2 tables in the article by having student rank order both the desired knowledge and Abilities Competencies as perceived by rural directors of Special Education by age of child served. First, students rank individually, then rank as team. The "correct" or "true" rank is that found in the article. By adapting the synergistic scoring method for teaming scenarios, net gain or loss of the team can be measured for team synergy. Simultaneously, students individually take the Group Styles Inventory (GSI - HI) for team functioning appraisal and feedback.


In this article one could use either the tables or respective parts of the text to develop a true or false knowledge of future special education teachers perceptions of rural teaching environments. Again, students score individually, then as a team, then a GSI and discussion. The article is the "truth" of what constitutes the accuracy for team synergy.

Variety of content with desired outcomes are virtually at the level of commitment and professional updating of oneself on the current trends, facts, dilemmas in the rural special education field. The cost of the Train the Trainers workshop for HI materials and use is not prohibitive given their usefulness. In addition, the initial costs of student consumables is the same or less than the cost of texts. The use of the library, with HI materials or others that you wish to incorporate, can provide an ongoing current rural focus to your team building curriculum.
References


Appendix A

Transdisciplinary Teaming Seminars:
TDT overview: Individual & Team Development
Seminar I

Philosophies

Transdisciplinary Teaming involves two elements that other teaming models do not:

1. Cross-training of disciplines through the ROLE RELEASE, i.e., the authorization by one discipline for team members from other disciplines to present specific information and perform specific skills through the use of systematic teaching-learning experiences which cross disciplinary boundaries in the areas of general information (GI) or knowledge sharing, information skill (IS) or skill development, and performance competence (PC) or behavior change; and

2. COLLABORATION, i.e., the interactive process that enables professionals from different disciplines to work together in managing mutually defined problems so as to reach outcomes that are enhanced or different from the outcomes that any individual or profession would produce independently, in other words, synergy.

Special Education and Communication Disorders share many professional similarities. However, differences that make them unique professions also exist. The purpose of TDT is to explore the similarities among differences, define differences, and educate others about the differences so that TD team members can operate as a "Unit of One" within the legal and ethical guidelines of each discipline to provide quality education within the department and quality service to special needs clients and families.

Transdisciplinary Teaming: Levels of Development

Level I: SPED/CD faculty and doctoral students
Seminar I - Overview: Individual & Team Development;
TDT comprehension and Reciprocal teaching;
Site: classroom.

Level II: SPED/CD faculty (on a needs basis) and doctoral students, clients and families;
Seminar II - Evaluation, Conflict Management, & Organizational Culture: TDT comprehension, reciprocal teaching, role release, managing conflict and agreement; the maze of organizational culture development (GI + IS), PC (perform a new skill).
Site: classroom, Comprehensive Clinic, Schools

Level III: SPED/CD faculty (on a needs basis) and doctoral students, clients, families, community
Seminar III - Research and Development: applications emphasis, case management: (GI + IS + PC)
Site: classroom, Comp Clinic, Schools, University departments.

Both individuals and teams will develop greater sensitivities and insights on both a personal and profession level relative to team membership by using specific strategies and assessment instrumentation.
Teams will develop topics and subsequent GI and IS tasks by using the TEC (target, Expand, and Contract) model and related strategies, such as, lateral thinking, synectics,...and so on.

TEC model incorporates the following:
- **Target/Task:** brainstorm the specific topics, GI, or IS, to be presented;
- **Expand/Explore:** brainstorm ways of presenting topics, GI, or IS;
- **Contract/Conclude:** narrow ideas to final plan for team presentation.

**TDT Seminar I Goals**

*General*
- to train and maintain a SPED/CD departmental faculty in the theory and practice of TDT.
- to develop the TDT competency and use of ROLE RELEASE and COLLABORATION in SPED/CD faculty.
- to use TDT faculty to train SPED/CD doctoral students in the theory and practice of TDT.
- to develop the TDT competency and use of ROLE RELEASE and COLLABORATION in SPED/CD doctoral students.

*Specific*
- to enhance self-awareness by assessing personal and team thinking and behavioral styles.

*Specific cont’d:*
- to use feedback from others constructively, to promote growth and change.
- to develop a method of understanding the behavioral implications of interaction styles in a group problem-solving situation.
- to develop a strategy for building on strengths and improving developmental team needs areas.
- to improve consensus decision making and team problem-solving skills.

**Outcomes**
- SPED/CD faculty who are knowledgeable and skilled in TDT, specifically ROLE RELEASE.
- doctoral students who are knowledgeable and skilled in TDT, specifically ROLE RELEASE, and who will enter the work force and facilitate the development of TDT in a variety of worksites.
- a unique doctoral program with emphasis on flexibility.
- implementation of a Comprehensive Clinic as a training laboratory and community service agency to provide wholistic, quality service to infants, toddlers, youth, and adults who have special communication/learning needs.
- a training site with a multicultural orientation where respective personnel will be better able to serve their unique populations.

**Format**

1. The seminar is divided into 15 modules: Theories of Teaming and Team communication 1 module; Individual Life-styles Development 2 modules; Individual and Team Development competencies - ROLE RELEASE & COLLABORATION Competencies 9 modules; Case Staffing and Analysis 1 module; Individual proposals 2 modules.

2. The first module will focus on the concepts and skills involved in TDT and emphasize the relative importance of completing the self and team development inventories and alternatives (*other than Human Synergistics.*
3. The second module will focus primarily on clarification of the LSI-1 and overview of LSI-2 with respective individual and team self-report evaluation instrumentation (*).

4. SPED/CD faculty and doctoral students will be divided into teams and will participate in Team Activities 1, 2, and 3 with accompanying GSI instrumentation.

5. Each Team will select 8 professional topics (4 SPED & 4 CD) to develop for ROLE RELEASE cross-training with 1 Team Development Status assessment (GSI). Each team will be responsible for developing 3 topics and will make a 1 1/2 hr. class presentation. Each presentation will include GI and IS relative to the topic.

6. Each doctoral student and team will complete a LSI-2 self-report inventory followed with individual and class debriefing / discussion.

7. One 60 minute case staffing will be conducted by each team. The staffing will be analyzed and critiqued during a later team presentation detailing the development of the team's process.

**Responsibilities of Participants:**

Faculty:

1. be an active participant in the TDT meetings and case staffing;
2. complete the required self-development inventories.

Doctoral Students:

1. be an active participant in the TDT meetings and case staffing;
2. complete the required self-development inventories.
3. document TDT self-development using a portfolio approach. Include individual and team evaluation results, e.g., LSI-1 & 2, LSI-PC, GSI's, other self and team-development inventories, etc., and a 2 page-typed (max) summary on your individual and team development respectively.
4. develop a brief research proposal relative to TDT.
### Appendix B

**Course Calendar**

<table>
<thead>
<tr>
<th>Session</th>
<th>Content Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>1*</td>
<td>Overview of the TDT process and the three TDT seminars; focus of seminar I; self-report inventories: assignment, complete 4 inventories to include LSI-1 * (other self-report) additional/alternative activities</td>
</tr>
<tr>
<td>2</td>
<td>Teaming Models; defining characteristics; TQM; stages of team development: qualia vs quantum questions; change (SUD'S-level); self-development inventories</td>
</tr>
<tr>
<td>3*</td>
<td>Dimensions of team communication: the N-person game; N-adic communication - A model for Role Release; LSI-1 debriefing and discussion; LSI-1: Prescription for Change (LSI-1 PC); other self-development instrumentation used; overview team synergy and development activities with respective materials. * RSEQ Nos.</td>
</tr>
<tr>
<td>4*</td>
<td>Announce teams: team membership rationale; introduction to Team Activity 1: Meeting Effectiveness Situation (MES) and Group Styles Inventory (GSI &amp; team GSI circumplex); other team development instrumentation used; class discussion on team synergy. * RSEQ Nos.</td>
</tr>
<tr>
<td>5*</td>
<td>Team Activity 2: Simulation - Desert Survival or Cascades and GSI &amp; team GSI circumplex; other team development instrumentation used; class discussion on team synergy; brainstorm for 8 TDT (4 SPED &amp; 4 CD) topics. *RSEQ Nos.</td>
</tr>
<tr>
<td>6*</td>
<td>Team Activity 3: Simulation - Jungle Survival and GSI with team GSI circumplex; other team development instrumentation used; class discussion on team synergy; midterm large group discussion and feedback session. * RSEQ Nos.</td>
</tr>
<tr>
<td>7*</td>
<td>Teams develop SPED and CD topic 1 respectively as assigned; each topic includes: general information, information skills, and performance competencies; GSI optional: * same as 6.</td>
</tr>
<tr>
<td>8</td>
<td>Presentation SPED 1 assigned team 1 1/2 hours; Presentation CD 1 assigned team 1 1/2 hours; discussion</td>
</tr>
<tr>
<td>9*</td>
<td>Teams develop SPED and CD topic 2 respectively as assigned; each topic includes: general information, information skills, and performance competencies; GSI optional if done on topic 1; * same as session 6</td>
</tr>
<tr>
<td>10</td>
<td>Presentation SPED 2 assigned team 1 1/2 hours; Presentation CD 2 assigned team 1 1/2 hours; discussion</td>
</tr>
<tr>
<td>11*</td>
<td>Teams develop SPED and CD topic 3 respectively as assigned; each topic includes: general information, information skills, and performance competencies; GSI optional if done on topics 1 or 2; * same as session 6</td>
</tr>
<tr>
<td>12</td>
<td>Presentation SPED 3 assigned team 1 1/2 hours; Presentation CD 3 assigned team 1 1/2 hours; discussion</td>
</tr>
</tbody>
</table>
13 Teams will respectively generate 1 Case Staffing; each staffing will last approximately 60 mins. and will be self-critiqued during a later presentation.

14 Each team will make an approx. 1 1/2 hr. presentation describing the development of the TDT competence of its members using examples from Team Activities (a portfolio assessment approach).

15 Each doctoral student will develop a research proposal relative to TDT and make a brief presentation (20-30 mins. with discussion).

16 Each doctoral student will develop a research proposal relative and to make a brief presentation (20-30 mins.); final wrap-up!
Americans are becoming more aware of the need to work with learners with disabilities during the critical early years. Failure to provide early learning experiences can lead to cumulative deficits that are more difficult and more costly to remediate at a later time. Programs such as Head Start have documented the long term benefits of early intervention (Hodgkinson, 1986). This has been confirmed by such research projects as the Perry Preschool Project (Schwinhart, & Weikart, 1980). According to the research, students involved in the project demonstrated significant gains by age fifteen and exhibited better achievement and motivation. Other research projects have documented the positive effects of early intervention on children who demonstrate various disabling conditions, including: Downs Syndrome (Hayden, & McGinness, 1977), and environmental deficits (Swift, Fine, & Beck, 1985). Long term effects include the inclusion of learners with disabilities and fewer special education service needs throughout schooling.

In fact, Garland, Swanson, Stone, and Woodruff (1981) calculated the cost of special education services provided to individuals with handicaps through age eighteen, if they received services beginning at: birth ($37,273), age two ($37,600), age six ($46,816), and age six with no movement towards complete mainstreamed service delivery ($53,430). The same study indicated that the cost of education per year increases with age:

- $2,021 for programs beginning in infancy (0-2 years)
- $2,310 for programs beginning in preschool (3 to 6 years)
- $4,445 for programs at the elementary and secondary levels.

The consequences of these and other studies are obvious. If learners receive services as soon as possible, their ability to participate in the regular classroom and independently in the community is enhanced. In addition, the long term cost for education is reduced (e.g., Fewell and Antley (1981) reported the total cost savings for twelve years of schooling per student was $29,608).

The need for intervention as early as possible was recognized by the federal government by the passage of Public Laws 94-142 and 99-457. In section 671 of the Education of the Handicapped Act Amendments of 1986, Congress found an urgent and substantial need to:

1. enhance the development of handicapped infants and toddlers and minimize their potential for development delay
2. reduce education costs to society, including schools
3. minimize the likelihood of institutionalization
4. enhance the families ability to deal with the needs of their children who exhibit disabling conditions.

This has been recognized in the state of Nebraska with the passage of LB 701 in 1991 which examines the implementation of PL 99-457 and the recent consideration of LB 520 (Early Intervention Act).

Stephens, Peary, and Sanders (1988) identified a number of reasons rural communities, like those in the panhandle of Nebraska, may encounter difficulties in coordinating services:

1. pressure on the local economy
2. pressure on public services in rural areas to deliver needed and required services
3. lower population density
4. weakening rural infrastructure to deliver services
5. persistence of underdevelopment of human capital
6. persistence of poverty.

As a result of these factors (i.e., economic, educational, medical), learners who are disabled lack either the services deemed necessary for them to meet their ultimate potential. This may involve the carry-over of intervention services beyond the six hour school day. A coordinated approach utilizing all of the services available in the community appears to be essential for effective provision of services to learners with disabilities. This is especially imperative in the provision of quality child care services.

Recent headlines emphasize the child care problems in the United States. Child care has come to the forefront of family concerns in the nineties. The lack of quality child care or the arrangement of care may become a crisis for the caretaker who works. This is especially true if the child in need of child care is disabled (Vadasy, 1986). Specifically, two concerns may arise, (1) ability to locate specially trained and experienced child care for the child with disabilities and (2) the affordability of such child care (Vadasy, 1986).

The need to locate and offer trained and experienced child care is imperative if targeted and obtained gains in the development of the learner with disabilities are to be maintained. The carry-over of programming beyond the school environment and the need to extend training to natural environments is well documented (Horner, Dunlap, & Koegel, 1988). In order for behaviors to be maintained and generalized, training must occur within environments which include an adequately trained staff. This staff would implement the planned behavior change programs in a community of typical children. It has long been recognized that “early learning can correct or reduce environmental or developmental deficits” (Kershman, 1985).
This has been recognized by the administration on Developmental Disabilities in their vision of complete community inclusion (USDHHS, 1991). Without such efforts, behavioral gains may be mitigated through an inadequate system of carry-over.

The need for adequately trained child care staff to deal with the unique needs of the learner with disabilities is vital (Vadasy, 1986). Such staff offer the learner with disabilities the individual attention necessary to carry-over programming occurring in other environments. Such programming may increase the cost of child care services. As a result, caretakers may find the cost of quality child care prohibitive.

Project Description

The primary focus of the project is to meet the unique child care needs of learners aged two to twelve years who demonstrate disabling conditions and their families who reside in the Dawes County area of the Nebraska panhandle. Several problems have been encountered in trying to develop a coordinated child care program, including:

Problem 1: Lack of quality child care services for learners with disabilities and their families.
Problem 2: Lack of integrated child care services.
Problem 3: A paucity of trained professionals in the area of child care services.
Problem 4: Child care services do not offer programming in integrated settings.
Problem 5: Carry-over of programming and the meaningfulness of such programming may be limited to the specific setting.

Target Population

The child care project aims to provide services to a specific target population. The child care services are provided to learners currently labeled developmentally disabled. According to federal definition (PL95-602), "Developmental disability means a severe, chronic disability which (a) is attributable to a mental or physical impairment or combination of mental and physical impairments; (b) is manifested before the person attains age twenty-two; (c) is likely to continue indefinitely; (d) results in substantial functional limitations in three or more of the following areas of major life activity: (1) self-care, (2) receptive and expressive language, (4) learning, (3) mobility, (4) self-direction, (6) capacity for independent living, (7) economic self-sufficiency; and (e) reflects the person's need for a combination and sequence of special, interdisciplinary, or generic care, treatment or other services which are of lifelong or extended in duration and are individually planned and coordinated." The child care services described herewith are not employed to identify learners with developmental disabilities, rather they offer child care services to those individuals aged two to twelve years identified as exhibiting a developmental disability. Learners identified as developmentally disabled who
reside in the Dawes County area will be eligible for the child care services. Other Nebraska residents may be eligible for the described child care services; however, due to geographic constraints, may be unable to avail themselves of this service.

Project Overview

The project utilizes a three pronged strategy to solve the child care problems for families with learners who demonstrate disabilities in the Dawes County area. The first is interagency collaboration. Interagency collaboration is viewed at both the national and state level as central to the provision of effective and efficient services to learners with disabilities. These learners primarily receive services through individual agencies and services which are often few and far between. In addition, confusion often arises regarding the responsibilities of the various disciplines and agencies in serving learners. If a truly integrated service model of child care is to be developed, interagency cooperation is essential in identification, as well as service provision and planning. By establishing coordinated child care procedures, a basis for future cooperative encounters among agencies and personnel is provided for the rural learner with disabilities. The proposed project develops a framework for coordinated child care services with a focus on learners who are disabled. It is estimated that approximately seven to ten learners under the age of twelve years and their families may benefit from such a service. The paucity of such a program has caused the effect of fragmented child care and intervention efforts to be limited. This lends support to the need for the funding of this project. Second, the project aims to provide carry-over of programming by trained child care professionals. Such programming is planned and implemented in coordination with the other agencies, including but not limited to, school officials, health care professional, and caretakers. The last strategy is to offer quality child care services which includes meeting the needs of the whole family. This means the inclusion of caretakers in the development and implementation of child care services.

Goals

The project has targeted several goals to insure quality child care for learners with disabilities and their families. These include:

1. to develop a management plan for delivery of child care services to learners with disabilities and their families (this involves coordination of staff and staff training to insure children and families receive the services they need)
2. to identify learners with disabilities and their families aged two to twelve years in need of before and after school child care and to increase the quality of child care services provided to these learners with disabilities and their families (specifically, this goal involves working with cooperating agencies to identify children in need of services and to coordinate child care services with those agencies)
3. to provide child care services to learners with disabilities and their
families, and increase awareness of effective child care programs for learners with disabilities and their families (included in this goal are activities which center around the training of professionals on topics demonstrating what child care is and what it is not, and how the child care project works with other agencies)

4. to evaluate the project impact (this involves evaluating the impact of the project among its participants, including learners, parents, staff, and cooperating professionals).

Resources

Chadron State College (CSC) is a publicly funded institution of higher education. Its mission has evolved from its heritage as a state normal school created primarily to prepare teachers to its present role as the only four-year college serving the western half of Nebraska, a rapidly changing and developing rural region. CSC offers the project the resources and facilities to complete the outlined project. The CSC Child Development Center is state licensed and nationally accredited by the National Association for Education of Young Children Child Care Program. It offers children between the ages of two and twelve years a developmentally appropriate, an active learning, and a practical problem solving environment for natural learning.

Each of the four main staff members who work with the children have a teaching degree in Child Development or Human Ecology. All other staff hired are college students who are interviewed and screened for special skills, talents, and career goals in Elementary Education, Special Education, Child Development, and/or Human Ecology. They are also required to meet state licensing requirements which include a health exam, free from conviction, references, and read a staff handbook thoroughly. They attend weekly staff training sessions which focus on topics relative to working with children on an individual basis meeting their unique, developmental, and specific needs.

Interagency Collaboration

The project is designed to incorporate all agencies which work with and for the interest of learners with disabilities. All agencies have committed their support to the project with the unique services they offer. They include, but are not limited to facility usage, referrals, health exams and screenings, testing, coordination of training, resources, professional expertise, assessment, and general support through networking to build a unified community approach to meeting the needs of learners with disabilities.

The project will coordinate a variety of existing agencies and programs which currently exist in Dawes County at this particular time as well as build a better support network among professionals, learners with disabilities, and their families.
At this time, the following plan which demonstrates collaboration with existing agencies and/or coalition for support services, referrals, and information has been developed to further display the project’s goals and objectives. Interagency cooperation includes:

<table>
<thead>
<tr>
<th>Agency/Program</th>
<th>Collaboration Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chadron City Schools</td>
<td>* Referral of names of learners with disabilities</td>
</tr>
<tr>
<td>Dawes County Rural Schools</td>
<td>* Coordination of resources, assessments, evaluations, training for staff and parents, professional talents and education resource materials</td>
</tr>
<tr>
<td>Northwest Community Action</td>
<td>* Referral of clientele</td>
</tr>
<tr>
<td>Nebraska Department of Social Services</td>
<td>* Health services on an individual need basis and referral as needed</td>
</tr>
<tr>
<td>Region 12 Special Education Planning Commission</td>
<td>* Coordination of resources, training components, networking of community services for children and families, and professional expertise</td>
</tr>
<tr>
<td>Chadron State College Child Development Center</td>
<td>* Professional knowledgeable and supportive of developmental disabilities requirements</td>
</tr>
<tr>
<td></td>
<td>* Network of professionals supporting and assisting other professionals on the project</td>
</tr>
<tr>
<td></td>
<td>* Regional knowledge and background regarding current trends in service delivery</td>
</tr>
<tr>
<td></td>
<td>* Developmentally appropriate environment for child care services</td>
</tr>
<tr>
<td></td>
<td>* Professional staff</td>
</tr>
<tr>
<td></td>
<td>* Training for staff and parents</td>
</tr>
<tr>
<td></td>
<td>* Curriculum materials and resources</td>
</tr>
<tr>
<td></td>
<td>* Time, energy, and professional expertise</td>
</tr>
<tr>
<td></td>
<td>* Assistance with networking and collaboration among agencies</td>
</tr>
<tr>
<td></td>
<td>* Referral for services</td>
</tr>
</tbody>
</table>
Chadron State College Education Department

* Secretarial assistance
* Support of faculty, course offerings, students, opportunity for field experiences
* Professional faculty for assistance with training, assessment, evaluation, resources, and curriculum
* Assistance with networking and collaboration among agencies
* Referral for services

It should be noted all agencies have worked together in the past and continue to work for the best interest of the individual learners involved in this project. The agencies are committed to the importance of building a unified program for learners with disabilities and their families. To insure the success of the project, cooperative funding through the Nebraska Department of Health Developmental Disabilities Project and Chadron State College have allowed the Child Development Center and college faculty time to spend on the project.

References


THE INDIVIDUALIZED EDUCATION PROGRAM MEETING: A STUDY OF NEED FOR TRANSDISCIPLINARY TEAM TRAINING

Abstract

Findings of the 1993 survey of parents, educators, and other child advocates indicate a level of implementation and further need for transdisciplinary teaming (TDT) in the Individualized Education Program (IEP) meetings.

Few teachers are going into and staying in Special Education. There is more paperwork being mandated in Special Education. More persons and agencies are demanding accountability in education in general, especially in the field of Special Education. For these reasons a TDT approach in rural districts may provide especially helpful in providing Special Education services when personnel and funds are limited. The tenants of TDT, when implemented with commitment are seen as being able to provide a framework in which these services can be effectively implemented.

Procedures and results

Teaming questionnaires were distributed to persons involved in many facets of IEP meetings, i.e. parents, regular education teachers, special education teachers, speech therapists, instructional specialists, home/hospital teachers, diagnosticians, special education administrators, psychologists, occupational therapists, physical therapists, counselors, a school nurse, campus administrators, and persons in the El Paso Learning Disabilities Association. The respondents were from rural and metropolitan school districts in southwest Texas and southern New Mexico.

Of the 69 study questionnaires distributed, 45 were returned (65%). Of the 50 questionnaires distributed in Texas, 37 were returned (74%). Of the 19 distributed in New Mexico, eight were returned (42%).

Responses in this study present perceptions on what is presently happening in IEP meetings, and what is needed for successful IEP meetings to occur. Respondents in both states indicate that the main focus of the successful meetings is the child, that training in the teaming process would be helpful, and that in successful team meetings the educational diagnostician generally does most of the communicating.

Responses

1. Attendance at IEP meetings appear to be somewhat different as reported by the those in Texas and New Mexico.

   A. The Texas sample respondent population indicated that attendance at IEP meetings
was highest in the high school (38%). The next level of attendance was in the elementary school (24%). The junior high/middle school levels and a combination of all three levels accounted for 14% each. An equal distribution of 5% attended meetings in combination settings of elementary/junior high/middle school and junior high/middle and high school.

B. The New Mexico sample population indicated that the level of greatest attendance at IEP meetings is at the junior high/middle school level (50). Attendance at the elementary level being second at 38%. Attendance at IEP meetings in the high school was reported to be less frequent (13%).

2. The number of meetings attended per year varied.

A. Most Texas respondents indicated that they attend ten or more IEP meetings per year (80.5%).

B. One half of the New Mexico respondents indicated that they attend ten or more IEP meetings per year (50%). A quarter of the respondents reported attending between four to six meetings per year. The remaining quarter of the sample indicated attending either none or only one IEP meeting per year.

3. The emphasis of successful meetings was reported as the child. The family and the team process were reported as the next most important factors. The professionals and legal standards were reported as the third group of significant factors in successful IEP meetings. Finally, the impact of the advocates and the environment were indicated to be of least importance on the success of the meetings.

4. The greatest amount of communication during successful IEP meetings is on the average done by the Educational Diagnostician. The Special Education teacher averages the next greatest amount of communication during successful meetings. There is a slight difference between respondent samples for the group that is the third most communicative, in New Mexico it is the regular education teacher and in Texas it is the parent. Parents are seen in both states as doing more communicating than administrators in successful IEP meetings. Speech therapists in Texas as seen as being more communicative than administrators. The groups indicating the least amount of communication during IEP meetings were counselors, occupational therapists, physical therapists, nurses, and representatives from community agencies.

5. That the primary service provider/case manager must be a member of the IEP committee team was the concept most strongly agreed upon by all respondents.
6. Respondents agreed that teaming and commitment are significantly helpful in the success of the IEP meetings. This pre-service and in-service training would allow for training in the team process and role identification training. The commitment to educating and training other team members in the fundamental understanding of their areas of expertise to allow for role release to provide for limited service providers or to allow for further incorporation of services in a curriculum are reported as significantly helpful in successful IEP implementation.

7. The next most important feature of the successful IEP meeting are the presence of clearly defined accountability measures which are present and observable.

8. The final two areas reported as imperative are the presence of clearly defined accountability measures and the observable presence of formative and summative measures. Not only are clearly defined accountability measures essential for the successful team meeting, but that they be implemented during the meeting and at the end of the meeting to assure adherence to the goals of the meeting.

Conclusion

Several inferences are presented by this study. Emphasis of the child in successful meeting is rated the highest area of importance in the study. Presently, respondents indicate that communication in meetings is not equally distributed among participants. Several respondents stated that more participation by parents and campus administrators is needed.

In the actual teaming activity itself, the strongest support was that the service provider/case manager for the child must be a committee member. Often this person is the teaching assistant, who is not included or does not attend the IEP meeting.

Team training which provides for the development of the team process and identification is viewed as the second greatest area of need by Texas respondents. Respondents in New Mexico reported that team commitment to educating and training other members, role release, is the second greatest area of need for the success of the IEP team meeting.

Because of the great amounts of time and expense involved in the Special Education meeting process, it is mandatory that the most efficient use of personnel and time be sought and implemented. Further study of this area is recommended to develop more efficient Special Education meeting processes. Of the currently described teaming systems identified as multidisciplinary, interdisciplinary, and transdisciplinary teaming, only transdisciplinary teaming mandates that the service provider be a team member, that there be training in process and the fundamental areas of member expertise, and that goal summaries be observable and present. Therefore, results of this study heuristically support need for the TDT components in successful IEP meetings.
### Three Teaming Process Models

<table>
<thead>
<tr>
<th>Element Variables</th>
<th>Multidisciplinary</th>
<th>Interdisciplinary</th>
<th>Transdisciplinary</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Emphasis</td>
<td>Client</td>
<td>Client + Process</td>
<td>Client + Process + Professionals + Family</td>
</tr>
<tr>
<td>2. Training</td>
<td>No</td>
<td>No</td>
<td>Required</td>
</tr>
<tr>
<td>3. Assessments, formative and summative</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>4. Accountability measures: personal and program goals and objectives</td>
<td>No</td>
<td>Maybe</td>
<td>Yes</td>
</tr>
<tr>
<td>5. Primary Therapist/Primary service Provider or Case Manager</td>
<td>No</td>
<td>Yes, May not be team member</td>
<td>Yes, Team member</td>
</tr>
<tr>
<td>6. Educating, training team members</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>7. Case stating</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>8. Exit stating</td>
<td>No</td>
<td>Maybe</td>
<td>Yes</td>
</tr>
<tr>
<td>9. Organized formal client introduction: objectives, form, categories, summary statement</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>10. Time limitation</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>11. Minutes maximum</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>12. Developmental meetings</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Notes: 1 - 10 should be observable in a Transdisciplinary Team Case Stating or Exit Stating.
Items 1 - 5 should be observable in Transdisciplinary Developmental Meetings.

*From: *Comparison of Cross-Disciplinary Team Models* by S. S. Farmer, 1992, New Mexico State University. Adapted from Fall 1992 class handout, uncopyrighted material.
Reference


Bibliography


ARE PRESERVICE GENERAL EDUCATORS BEING ADEQUATELY PREPARED FOR INCLUSION?

Introduction

Historically, special education and general education have coexisted as dual systems at the school level and at the preservice level. At the school level, special education services have typically involved pulling students out of their regular classes to receive "special" instruction in segregated settings. At the preservice level, future educators from both disciplines typically received their training with little or no interaction with the other.

The practice of mainstreaming (placing students with disabilities in regular classrooms) has been around for many years but has not been practiced consistently in all parts of the country. The least restrictive environment provision (LRE) of Public Law 94-142 (now referred to as PL 101-476, the Individuals with Disabilities Education Act or IDEA) resulted in a dramatic increase in the number of students with disabilities who received some or all of their education in the general classroom. However, this dual system of education and teacher preparation has persisted.

This dual system of education has been challenged by many parents and professionals over the last two decades. Probably the most influential challenge came from Madeline Will, the former Assistant Secretary for the Office of Special Education and Rehabilitative Services. In her 1985 speech and subsequent writings, Secretary Will called for a "shared responsibility" between regular and special education. Rather than the consolidation of the two fields, Will (1986) called for an educational partnership in which special education and general education "cooperatively assess the educational needs of students with learning problems and... cooperatively develop effective educational strategies for meeting those needs" (p. 415).

Secretary Will's call for a shared responsibility between the two disciplines soon became known as the "regular education initiative" or "REI." More recently, the terms "full inclusion" and "neighborhood school movement" have become popular. As these movements gain acceptance the likelihood that teachers in the general classroom will be expected to work with diverse student populations (including students with disabilities) also increases.

But how are general educators being prepared to work with these students with diverse needs? Jones and Messenheimer-Young (1989) conducted a review of the literature and found that there has been an increase over the past decade in the number of states that require some special education coursework by preservice general education teachers. As of 1980, Smith and Schindler reported that only 15 states required a course on exceptionalities for teacher certification. Hartle (1982) found that 17 states had a special education course requirement and 18 states had competencies only; 5 states required both coursework and competencies, but 11
states had no requirements. By 1984, Ganschow, Weber, and Davis reported that 21 states required special education coursework, 15 states had identified competencies, and 14 states had no requirements. Patton and Braithwaite (1990) reported that 37 states required special education coursework for initial general education certification, and that 14 states had no requirement.

A survey by Fender and Fielder (1990) was conducted to determine university special education coursework requirements for students enrolled in general education programs. The following is a summary of their findings: (a) 80% stated that a special education course was required by the state, and 85.5% stated that it was also a university requirement; (b) most of the courses were either 3 semester hours or 3 quarter hours; (c) 67.5% of the sites reported that information on disabilities was integrated into additional courses; (d) 61% of the students taking the special education course were elementary majors and 29.8% were secondary majors; (e) 33.5% reported that a field experience was also required, but 28.9% said that it was not; 80.1% stated that this was the only required special education course for general education majors.

Jones and Messenheimer-Young (1989) identified the two main types of special education courses that are usually required of preservice general educators: exceptionalties courses and mainstreaming courses. Exceptionalities courses mostly focus on the characteristics of students with various disabilities. Mainstreaming courses generally cover the modification of curriculum, instruction, and learning environments for students with disabilities. Welch and Sheridan (in press) have criticized both types of courses stating that exceptionalities courses tend to perpetuate stereotypes and attitudes that reinforce perceived differences, and that neither type promotes educational partnerships or collaboration with other professionals or parents.

Downing and Bailey (1990) reported on a trend in which preservice educators from all disciplines (general education, special education, school psychology, counseling, and administration) are being trained and socialized to support each other through collaboration. Bucci and Reitzammer (1992) stated that "teachers who work with students in at-risk situations must recognize that they are part of a team effort focusing on the academic, health, and social development of the student and that they function as part of the community" (p. 292).

The present study focused on one course and one project at the University of Utah which were attempts to promote educational partnerships and collaboration between professionals. The course was called Educational Partnerships: Serving Exceptional Students (SPED 503). This course is a requirement for elementary education and special education majors. The course provides a fundamental understanding of exceptionalties, mainstreaming techniques, and professional collaboration. The two main components of the class are class discussions and field-based projects. Students from both disciplines are assigned to teams to complete the field-based projects. The main objective of the field-based projects is to instill the collaborative ethic at the preservice level. The course emphasizes an ecological approach that promotes an awareness of the existing resources within schools for meeting the needs of students and teachers.

The project that was investigated in this study was called the Site-based Transdisciplinary Educational Partnerships (STEP) project. STEP is a federally funded project in which transdisciplinary teams, comprised of students from the departments of Educational Studies, Special Education, Educational Psychology, and Educational Administration, engage in...
collaborative activities over two academic quarters while working with students who are at-risk or with students with disabilities in public school settings.

The purpose of this study was to investigate the effect of special education coursework on the attitudes and perceived competencies of preservice general education teachers towards students with disabilities in the general classroom. The study asked the following three research questions: 1. Will special education coursework result in a significantly higher posttest gain score for the total instrument (attitude survey and skills and knowledge survey)? 2. Is there a significant difference in the reported attitudes of preservice general educators towards mainstreamed students with disabilities between the three treatment groups? and, 3. Is there a significant difference in the perceived skills and knowledge of preservice general educators towards working with mainstreamed students with disabilities between the three treatment groups?

Method

Subjects

The participants in this study were chosen because they represented three distinct groups of university students in relationship to the amount and type of coursework they had received in the area of special education. Group I (N= 35) was comprised of elementary majors who were enrolled in Special Education 503, Educational Partnerships: Serving Exceptional Students. Group II (N= 9) was comprised of university students from preservice teacher education programs who were participating in the STEP project. Group III (N= 14) was comprised of university students who were enrolled in a secondary teacher preparation cohort program, but who were not required to take special education coursework. Subject profile data are provided in Table 1.

Instrument

A 3-part questionnaire was used in this study. Part I (items 1-8) was developed to obtain demographic information about the subjects. Data from Part I of the questionnaire are reported in Table 1. Part II (items 9-38) was a 30-item, 6-point, Likert-type survey on attitudes towards mainstreamed students that was adapted from a previous study by Larrivee and Cook (1979). Subjects were asked to respond to the stimulus questions on a scale of 6 (strongly agree) to 1 (strongly disagree). The original 5-point instrument was changed to a 6-point in order to force the subjects into declaring either a positive or a negative response rather than a neutral one. A split-half reliability of .92, as determined by the Spearman-Brown reliability coefficient, was reported by Larrivee and Cook (1979). Green, Rock, and Weisenstein (1983) reported an internal consistency reliability of .89. This author maintains that the change from a 5-point scale to a 6-point scale should not significantly alter the reliability coefficients.

Part III (items 39-54) of the questionnaire was adapted from a previous instrument developed by Phillips, Allred, Brulle, and Shank (1990). This 16-item survey was included to measure the subjects' perceptions of their knowledge about and ability to work with students with
<table>
<thead>
<tr>
<th>Subject Profile</th>
<th>Group I</th>
<th>Group II</th>
<th>Group III</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Educational Studies major?</td>
<td>Yes - 35; No - 0</td>
<td>Yes - 6; No - 3</td>
<td>Yes - 0; No - 14</td>
</tr>
<tr>
<td>2. Elementary or Secondary?</td>
<td>Elem. - 35; Sec. - 0</td>
<td>Elem. - 6; Sec. - 3</td>
<td>Elem. - 0; Sec. - 14</td>
</tr>
<tr>
<td>3. Approximate number of quarter hours taken in educational studies.</td>
<td>mean = 43</td>
<td>mean = 45</td>
<td>mean = 17</td>
</tr>
<tr>
<td>4. Previous special education coursework?</td>
<td>Yes - 5; No - 30</td>
<td>Yes - 8; No - 1</td>
<td>Yes - 1; No - 13</td>
</tr>
<tr>
<td>5. Previous teaching experience?</td>
<td>Yes - 13; No - 22</td>
<td>Yes - 6; No - 3</td>
<td>Yes - 5; No - 9</td>
</tr>
<tr>
<td>6. Previous experience working with children with disabilities?</td>
<td>Yes - 12; No - 23</td>
<td>Yes - 8; No - 1</td>
<td>Yes - 6; No - 8</td>
</tr>
<tr>
<td>7. Age?</td>
<td>mean = 29.8; median = 26; range = 20 - 48</td>
<td>mean = 34.3; median = 35; range = 21 - 44</td>
<td>mean = 26; median = 24.5; range = 20 - 39</td>
</tr>
<tr>
<td>8. Gender?</td>
<td>Female - 33; Male - 2</td>
<td>Female - 8; Male - 1</td>
<td>Female - 9; Male - 4</td>
</tr>
</tbody>
</table>
disabilities. The items used in Part III were also converted to a 6-point, Likert-type response format. To prevent the total instrument from being too lengthy, only 16 items from the Phillips et al. instrument were used. No reliability or validity coefficients have been reported for Part III. However, post hoc comparisons using data from Group I (SPED 503) and data from the same subject pool (who were not included in the final data because they had not taken the pretest) did not indicate a significant difference in mean scores. Also, the author presented the items from Part III to several colleagues who determined that these items demonstrated good face validity.

Procedures

The subjects from Group I (SPED 503) and Group II (STEP) were asked to complete the questionnaire during the first class session (pretest) and again during the last class session (posttest). Since the subjects in Group III (Cohort) did not receive treatment (special education coursework), they were only given a posttest. All subjects were informed that participation was voluntary and that their anonymity would be maintained. All data were collected during the 1993 winter and spring quarters.

Results

Likert-type data, while clearly ordinal in nature, do permit the calculation of an arithmetic mean. Although treating ordinal data like interval data makes false assumptions (1. that all respondents have a common understanding of each response's meaning, and 2. that an equal distance exists between each category), it has become an accepted practice with Likert-type data because of the power of the information that is obtained (Rea & Parker, 1992). The author of this study used analysis of variance (ANOVA) to test for significant differences between treatment groups.

Research Question 1

This question asked: "Will special education coursework result in a significantly higher pretest to posttest mean gain score for the total instrument?" For this question, Group I (SPED 503) and Group II (STEP) were compared. ANOVA revealed a significant difference in pretest to posttest gain scores between the two groups: F(1, 42) = 22.2, p < .001 (see Table 2). A summary of pretest, posttest, and gain scores is provided in Table 3.

Research Question 2

Question 2 asked: "Is there a significant difference between treatment groups in reported attitudes towards mainstreamed students?" Data from Part II of the instrument were compared between the three treatment groups. ANOVA did not indicate a significant difference between the three groups at the p < .05 level (see Table 4). A summary of posttest mean scores from Part II is provided in Table 5.
Table 2
Analysis of Variance With Posttest-Pretest Gain Scores

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>DF</th>
<th>MS</th>
<th>E</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>3.02176</td>
<td>1</td>
<td>3.02176</td>
<td>22.36</td>
<td>0.0000</td>
</tr>
<tr>
<td>Method</td>
<td>3.00113</td>
<td>1</td>
<td>3.00113</td>
<td>22.20</td>
<td>0.0000*</td>
</tr>
<tr>
<td>Error (1)</td>
<td>5.67692</td>
<td>42</td>
<td>0.13516</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Method = Group I (students enrolled in Special Education 503) and Group II (students enrolled in the STEP Project).
*p < .001

Table 3
Pretest to Posttest Gain Score Comparison

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Pretest M</th>
<th>SD</th>
<th>Posttest M</th>
<th>SD</th>
<th>Gain</th>
</tr>
</thead>
<tbody>
<tr>
<td>I (SPED 503)</td>
<td>35</td>
<td>3.79</td>
<td>.36</td>
<td>4.44</td>
<td>.35</td>
<td>.65</td>
</tr>
<tr>
<td>II (STEP)</td>
<td>9</td>
<td>4.36</td>
<td>.40</td>
<td>4.36</td>
<td>.56</td>
<td>.00</td>
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</tbody>
</table>

Table 4
Analysis of Variance With Posttest Scores
Opinion and Attitude Survey

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>DF</th>
<th>MS</th>
<th>E</th>
<th>P</th>
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<tbody>
<tr>
<td>Mean</td>
<td>801.62730</td>
<td>1</td>
<td>801.62730</td>
<td>4071.14</td>
<td>0.0000</td>
</tr>
<tr>
<td>Method</td>
<td>0.54785</td>
<td>2</td>
<td>0.27395</td>
<td>1.39</td>
<td>0.2574*</td>
</tr>
<tr>
<td>Error (1)</td>
<td>10.82977</td>
<td>55</td>
<td>0.19690</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Method = Group I (students enrolled in Special Education 503), Group II (students enrolled in STEP Project), and Group III (students in cohort-control group).
*p > .05
Research Question 3

Question 3 asked: Is there a significant difference between treatment groups in perceived skills and knowledge for working with students with disabilities?" ANOVA revealed a significant difference between treatment groups: F(2,55) = 9.77, p < .001 (see Table 6). A summary of posttest scores from Part III is provided in Table 7.

Discussion

Concerning research question 1, analysis of the data suggests that special education coursework did result in a significantly higher posttest gain score (.65) for Group I (SPED 503) than for Group II (STEP) (.00 gain). The implications of this finding needs to be considered within a broader context. First, for most of the subjects in Group I (SPED 503) this was their first exposure to special education coursework. Most of the subjects in Group II (STEP) had been exposed to previous special education coursework, including the course that Group I was currently enrolled in. Second, the subjects in the STEP project are self-selected in that participation is voluntary and that they enter the project with preexisting favorable attitudes towards students with disabilities. Third, since the subjects from Group II (STEP) started with a higher pretest mean than the subjects from Group I (SPED 503) they probably had less room to demonstrate growth. This could be attributed to a "ceiling effect" in that the subjects' pretest scores were at or near the possible upper limit (Vogt, 1993). Realistically, Group II could not have demonstrated as much gain as Group I. This should not, however, diminish the significant gain that was made by Group I.

The author was surprised by the results of research question 2. The data revealed no significant difference between the three treatment groups concerning attitudes towards mainstreamed students. The original hypothesis was that Group I and Group II would be significantly higher than Group III (Cohort). One possible explanation for this is that the subjects from Group III responded the way they thought they "should" rather than how they really believed. However, if the subjects did respond truthfully, the results of this section indicate a positive trend and could indicate that future educators will be more receptive to working with students with disabilities.

The results from research question 3 were not as surprising. As predicted, the subjects from Group I (SPED 503) and Group II (STEP) produced a significantly higher score on the skills and knowledge base section of the questionnaire. This finding suggests that although preservice educators in general report positive attitudes towards students with disabilities, the subjects who have received special education coursework report a higher confidence level in their knowledge base and abilities to work with these students. This finding supports the position that all preservice educators can benefit from coursework that focuses on techniques and strategies for working with students with disabilities in the general classroom and collaboration with other professionals. Moreover, this study supports the findings of previous studies (Hartle, 1982; Hoover, 1986; Jones & Messenheimer-Young, 1989; Phillips et al., 1990) that the infusion of special education curriculum into the general education program is beneficial and should continue.
Table 5  
Opinion and Attitude Survey  
Mean Scores Summary

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Pretest M</th>
<th>SD</th>
<th>Posttest M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>I (SPED 503)</td>
<td>35</td>
<td>3.79</td>
<td>.36</td>
<td>4.44</td>
<td>.35</td>
</tr>
<tr>
<td>II (STEP)</td>
<td>9</td>
<td>4.36</td>
<td>.40</td>
<td>4.36</td>
<td>.56</td>
</tr>
<tr>
<td>III (Cohort)</td>
<td>14</td>
<td>4.21</td>
<td>.57</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 6  
Analysis of Variance With Posttest Scores:  
Skills and Knowledge Base Survey

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>SS</th>
<th>DE</th>
<th>MS</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEAN</td>
<td>813.55940</td>
<td>1</td>
<td>813.55940</td>
<td>2335.28</td>
<td>0.0000</td>
</tr>
<tr>
<td>METHOD</td>
<td>6.80729</td>
<td>2</td>
<td>3.40365</td>
<td>9.77</td>
<td>0.0002*</td>
</tr>
<tr>
<td>ERROR (1)</td>
<td>19.16080</td>
<td>55</td>
<td>0.34838</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .001

Table 7  
Skills and Knowledge Base Survey  
Mean Scores Summary

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Pretest M</th>
<th>SD</th>
<th>Posttest M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>I (SPED 503)</td>
<td>35</td>
<td>3.65</td>
<td>.81</td>
<td>4.63</td>
<td>.55</td>
</tr>
<tr>
<td>II (STEP)</td>
<td>9</td>
<td>4.42</td>
<td>.26</td>
<td>4.64</td>
<td>.48</td>
</tr>
<tr>
<td>III (Cohort)</td>
<td>14</td>
<td>3.83</td>
<td>.73</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Limitations

The author acknowledges the following limitations of this study. First, the unequal size of the treatment groups and the small number of subjects in Group II and Group III make generalization of the results difficult. Second, the possibility that Group II (STEP) experienced a ceiling effect makes the value of a pretest to posttest comparison questionable for these subjects. A third limitation is the possible effect of test practice on the internal validity when doing a pretest to posttest comparison. However, examination of the data along with the length of time between measures has led the author to conclude that test practice influence was minimal. A fourth limitation is the lack of data supporting the reliability and validity of Part III of the instrument. A follow-up study is currently in progress to further validate this study and to address the limitations of this study.

Recommendations

The author recommends that a more informative and appropriate approach to use in investigating the effectiveness of the STEP project would be through a qualitative study. This study could take the form of interviews (structured and unstructured) and site observations, and would be conducted after the participants had completed the STEP project and when they had obtained positions in the public schools. The study would focus on the perceived benefits of the project in relation to actual job experiences. Observations would help to determine whether or not methods and procedures that were taught in the project were actually being used. The observations would also help to determine if collaboration was being practiced by the participants.

Conclusion

If Will's call for a shared responsibility between regular and special education is to become a reality, it is essential for all of the educational disciplines to work together at the preservice level. Each discipline has its own unique set of skills and information. When professionals from the different disciplines collaborate they become more effective and, in turn, provide better services for all students.
References


Welch, M., & Sheridan, S. M. (In press). Educational partnerships in teacher education: Reconceptualizing how prospective elementary teachers are prepared for teaching students with disabilities.

REACHING OUT TO THE WORLD:  
TRAINING TEACHERS TO INTEGRATE TELECOMMUNICATIONS 
INTO SPECIAL EDUCATION CLASSROOMS

Introduction

Telecommunication offers new opportunities for special education teachers and their students by providing a network of informational resources that open up a world with which to communicate. This technology can be utilized both in professionally networking with others, and in providing exciting activities for their students. These educational uses of telecommunications can enable teachers to overcome a variety of barriers that they face in providing appropriate and motivating services.

Because telecommunications is a relatively new use of computers in the schools, few teachers have developed the skills required to make effective use of this new technology. In order to meet this need for continuing professional development, teacher training needs to be provided for developing skills in telecommunications and its integration into the special education curriculum. Training can be delivered through formal coursework at universities or through more informal staff development workshops or in-services. Rural schools need to explore alternative means of providing this training.

Teacher training needs to include basic technical information related to telecommunications hardware, software, logistics of implementation, and applications in content areas and suggested instructional activities. Teachers and teacher educators need to become better informed about the variety of possible uses of telecommunications in special education classrooms and the rationale for their use. These teacher training materials need to be based on the philosophy that computer technology should not be taught as an isolated skill, but should be integrated as a tool across all content areas. Teacher training activities should serve as the model of this type of classroom teaching. Teacher training activities should make use of the computer as a tool to teach other skills; computer uses demonstrated during the training should be shown being integrated into a variety of different content areas.

In designing this training, special educators and teacher trainers need to develop an awareness and knowledge of: 1) the use of step-by-step teacher training materials that can be used in developing skills in individual professional development in isolated settings; 2) the educational potential of telecommunications across the curriculum; 3) the hardware and software aspects of telecommunications; and 4) Internet resources that can be utilized in special education classrooms.

Importance of Telecommunications in Rural Areas

Teachers in rural settings, such as West Virginia, frequently face both lack of resources and feelings of isolation. These teachers are distanced from informational resources found in large urban libraries or universities and do not have easy access to professional support or consultants' expertise. These teachers are usually the only special educators in their small schools; so they lack
even the support of other special education professionals.

Telecommunications offer new sources of support to rural special education teachers and their students by providing a network of informational resources. Rural teachers can particularly benefit from using technology both to expand their professional network and to provide academic activities for their students. Collaborative class projects can be undertaken among classes in diverse sections of the world. Technology can help to reduce barriers of accessibility for students who are physically challenged.

Telecommunications permit teachers to send and receive electronic mail messages, take part in electronic conferencing, access special interest groups and bulletin boards, and retrieve information from data bases. Each of these telecommunication activities can be utilized either primarily for the professional use of the teacher or primarily for the support of educational activities of the students.

Telecommunications is a relatively new use of computers in schools and few teachers, particularly those in smaller school systems, have developed the necessary skills to utilize this new technology. Training can be provided through university courses, as well as district-wide staff development workshops or in-services, but teachers in isolated settings will have difficulty accessing these traditional training sources. Rural schools need to examine options for alternative methods of training by utilizing structured training modules that can be used by individuals or small groups.

**Teacher Training Module**

A teacher training module was developed for use in a graduate level class, "Computer Applications in Special Education." However, these training activities could be readily utilized in other types of training formats. This step-by-step lab guide could be easily utilized by teachers in rural settings for their own individual professional development or it could be used by a group of teachers working together in a small group for an informal staff in-service or workshop. The emphasis of this entire course is placed on integrating all computer skills, including telecommunications, into the curriculum rather than teaching computer skills as an isolated subject such as in a computer literacy class.

In order to implement telecommunications activities in special education classrooms, teachers must develop general knowledge and specific technical skills in: 1) evaluating and obtaining the necessary hardware and software; 2) planning for implementing and overcoming the barriers in a school building; 3) developing the skills in using the hardware and software; and 4) generating ideas for integrating use in a variety of content areas. Any training developed must include activities that develop skills in each of these areas.

**Theoretical Base**

This teacher training module is based on the philosophy that skills should not be taught in isolation, but need to be related to their uses in a special education classroom. Philosophically, it is felt that teachers need to see an immediate application of the technology to their classroom setting, so a variety of curriculum applications need to be provided in which the hardware or software being taught can be utilized. Teachers will more readily accept the need to learn these new skills when their usefulness is readily demonstrated within the training activity.

This module was also based on the philosophy that computers are not taught as a separate subject, but as a tool to be utilized across all content areas. It needs to be emphasized that telecommunications lessons are not just a separate "fun" activity done in a computer class, but a
tool that can be utilized throughout the curriculum. Thus, as new technical skills are developed, their curriculum applications must be included, and uses need to be demonstrated across subject areas. Along with new computer skills, teachers also need to develop skills in planning lessons and integrating activities throughout all the content areas.

The structured lab guides are based on the philosophy that teachers need to view computers as being user friendly and that users need to have access to step-by-step instructions that will continue to be available after completing the training course. These training materials were designed with a step-by-step structure by task analyzing the computer activity and then field testing for use without further use of other documentation. They were designed so that students could be independently successful in their interactions with the technology. The step-by-step lab guides also allow teachers to continue to utilize them later in their schools. The directions need to be structured and condensed so that students can be successful in their use of these activities and that these lab guides can serve as future reference guides.

Each training activity incorporates and models aspects of curriculum integration as skills are taught about the use of telecommunications. Teacher training lessons need to provide the role model for how teachers can integrate computer technology into their own special education classrooms.

Telecommunications Hardware

Teachers need a general knowledge of the computer hardware utilized in telecommunications, an understanding of what problems might arise in setting up telecommunications in a school setting, and a skill in brainstorming ideas and problem solving how to overcome these barriers. To initiate a new technology project in a school, teachers need to have sufficient knowledge to guide the purchase of appropriate equipment and to respond to feasibility questions by administrators.

The hardware required to initiate a telecommunications project include a microcomputer, a dedicated telephone line, and a modem.

Teachers are not likely to know what a modem is and how to select the appropriate one to purchase. A modem connects a computer to standard phone lines. A modem allows two computers to communicate over phone lines and to act as if they were directly connected. A modem (short for modulator/demodulator) is a device that allows translation of computer data into an electronically transferrable signal along a telephone circuit. Modems can be purchased to be installed internally or to be attached externally. Modems transmit data at a speed measured by baud rate, which is the number of bits per second. A 2400-baud or a 9600-baud modem is the current choice of most users.

Telecommunications Software

Before beginning any new project using telecommunications, teachers need a general knowledge of the necessary computer software, an understanding of the system used to access its capabilities, and the technical skill in using all of this. This knowledge is needed to guide the purchase of appropriate communications software and to secure membership in an appropriate communications network. Teachers must be able to evaluate the classroom uses required and to identify the types of systems that can meet these needs.

Specialized software that allows the microcomputer to be converted into the "terminal mode" provides the set of computer instructions that determine how the computer should process the information it receives or transmits. The software can set up the autodial and autoanswer...
capabilities of many modems, automatically dialing numbers the user has set in the memory of the program. The software can control functions such as communications protocols, data transfers, and command operations. Some allow the computer to save information on disk, letting information be saved for future reference. Text files can be retrieved and then modified using any word processor.

Besides the software, the user must subscribe to an information system, or network, (with or without cost) which provides an account number and password allowing access to the system. Many state educational agencies have developed state-wide computer information networks. Commercial systems, such as Prodigy or CompuServe, are also available.

As part of the training activities, a HyperCard simulation was created that allowed students to write a grant proposal to implement a telecommunications project in their school. A Resources section provided information on various modems and communications software along with prices that students could access in developing their proposed budget. Part of the grant proposal writing was to develop a budget along with a rationale for the hardware and software selected. In the project description students were to generate a section on implementation in their school (training needed, logistics, incorporation with existing technology, problems that might be encountered) as well as a section on integration into the curriculum.

**Barriers to Implementing Telecommunications**

Probably the most significant barrier in establishing telecommunications within a school is the need for a phone line. Options to explore are using the school's fax line, sharing of any special lines within the school (in West Virginia the state established a special line for the school lunch program so that daily counts could be transmitted), or placing a switch on regular phone lines. If these options are not possible, alternate access to a modem could be after school hours either from school, home, or at a business location.

In a recent study of telecommunications in K-12 schools (Honey and Henriquez, 1993), other barriers to effective use of telecommunications included lack of time in the school schedule, inadequate communication about telecommunications-related matters throughout the school system, lack of financial support, and inadequate district-level development of goals and plans for use of telecommunications.

As with the introduction of all new technologies, other problems include insufficient hardware (in this case, modems), inflexible scheduling or lack of access to equipment, and lack of administrative support for training and/or purchase of equipment.

**Integration in Content Areas**

Teachers need a general knowledge of the wide range of possibilities provided by telecommunications, an understanding of available services to enhance the learning of teachers and students, and specific technical skills in accessing appropriate one's. But, most importantly, teachers need to develop the philosophy of telecommunications as a tool to be integrated within content areas and not just as an end in itself.

Telecommunications activities are not just a separate activity done in a computer class, but a tool that can be utilized throughout the curriculum. While developing the technical skills of using the technology, teachers also need to develop skills in planning lessons and integrating activities throughout all the content areas.

Each of the training activities in this module incorporates and models aspects of curriculum
integration as skills are taught about the use of telecommunications. Examples of some activities include the following:

1. **E-Mail Activity - Electronic Class Discussion of Journal Articles**

   Each pair of teachers is given a journal article that illustrates different uses of telecommunications in a variety of content areas. After reading and discussing their articles, each pair is to send a summary and several discussion questions as an electronic mail message to other members of the class. Specific steps for getting on to the system and sending an electronic mail message are outlined step-by-step in the lab guide. Other students ask questions about the article, to which the original sending pair can respond. The idea of "key pals" replacing the traditional "pen pals" can be introduced into the discussion. The advantages for special education students can be emphasized (neat appearance of typed message versus illegible handwriting, spell checkers, faster responses). Through either on-line or off-line discussions students should be focused on looking for activities, or modifications of activities, that they might make use of in their own classrooms.

2. **Using Internet Resources - Math / Science / Social Studies Questions**

   Teachers are given directions on how to access the University of Michigan Weather Service and/or the Geographic Name Server through the Internet as an example of using telecommunications for information retrieval. A worksheet is provided using math, science or social studies oriented questions. Steps in the lab guide outline how to use an address to get to an Internet location and then suggest how to use the menu and submenus to locate answers. Teachers are then challenged to develop their own questions based on areas of math, science or social studies that they might teach with their own classes.

3. **Using On-Line Library Services**

   Teachers are given directions for accessing Mountain Lynx, WVU's on-line library system. This could also be done by accessing ERIC on-line or with any of the CD-ROM encyclopedias. The lab guide challenges them to locate a book on the topic of using computers with children in the library system. The lab guide instructs students as to how to use key word and subject searches and then encourages them to try different search strategies for locating this information. Off-line students are placed in groups and asked to develop a lesson for teaching computer search strategies to their own students. Discussion is focused on the difficulties that students have in developing effective search strategies. On-line searches can only retrieve information if the user can make effective use of key word and subject searches.

4. **Using a Bulletin Board**

   "Kidsphere" is an on-line bulletin board for K-12 educators. Students are shown how to access an account for this bulletin board and to read new messages that have arrived in order to demonstrate the wide variety of subjects covered. The lab guide outlines how to read and delete mail messages, to use the directory to see the subject headings of messages, to search for key topics, and to save text files. They are also given information about subscribing to this bulletin board. Students are challenged to locate one activity or idea that could be utilized in their own classroom and also to think of one collaborative project that they would send out to other teachers through this group.

**Summary**

Telecommunication can provide a means for overcoming the barriers of isolation and lack
of resources in rural special education classrooms. Telecommunication can be utilized both to support professional networking and student educational activities and projects.

Since the use of telecommunications technology is not an established practice within our special education classrooms, opportunities for teacher training need to develop these competencies and create the philosophy of utilizing this technology as a tool across all content areas. The special needs of teachers in isolated settings need to be considered and alternative delivery models of training need to be considered. Individuals, or small groups of teachers working together, can utilize a structured learning guide to develop these new skills.

Training materials, such as this module, need to be developed that would increase knowledge and skills in: 1) use of the hardware and software, as well as specific understandings of how to evaluate appropriateness because they might be involved in the purchase of new equipment; 2) problem solving skills to overcome barriers in establishing a new program in a school setting; and 3) specific technical knowledge and skill in accessing electronic resources, and in curriculum planning to integrate this new technology as a tool for expanding both professional knowledge and student learning.

Training materials need to provide step-by-step directions that are user friendly in order to insure success and that can be utilized for future reference after the training course is completed and teachers are back alone in their schools. Training materials need to demonstrate that telecommunications is not an end to itself but a tool that is used in all areas across the curriculum.

References


AN OVERVIEW OF GIFTED EDUCATION VIA CORRESPONDENCE TO PRESERVICE TEACHERS IN RURAL AREAS

Introduction
Witters and Vasa (1981) consider the most important task beyond technological developments, in providing opportunities for rural gifted youth, to be the selection and training of teachers. Problems with obtaining resources, transportation, and materials can be inhibiting not only to the cultural and intellectual development of students but can be inhibiting to teachers as well, as they seek training to teach these students appropriately. This relatively low incidence population is difficult enough to serve in rural areas without the added problem of teachers being unable to acquire appropriate training without having to travel great distances to attend a college or university class. Offering courses in off-campus centers alleviates the problem of providing relevant, appropriate coursework to a great extent. Even these centers, however, are often too far away for many students in a very rural state. Delivering coursework via distance learning may also be a good substitute for the traditional classroom, but this can be an expensive solution when the enrollment is small.

Following is a brief description of the components of a correspondence course and outline to be used for delivery of an introductory course in gifted education for preservice teachers in rural areas. Where teachers are able to attend classes within a reasonable distance to an off-campus center, they are required to do so. The correspondence option is only open to those who live too far away to even attend those classes.

Organization
Introduction to Gifted Education is divided into five main themes or modules:
1) Nature of Intelligence/Giftedness/Creativity
2) Definitions/Screening/Assessments
3) Program Prototypes
4) Curriculum Models
5) Special Populations/Issues/Teachers
Each Module contains readings from the text, Growing Up Gifted (Clark, 1992) and selected articles from leading journals in gifted education such as 1) Roeper Review, 2) Gifted Child Quarterly, 3) Journal of Gifted Education and others. Assignments related to the readings accompany each module. For Module IV, there are video tapes (some featuring students) which demonstrate the use of the more widely used program models.

Materials
Materials required in the course include:
• Textbook
• Journals
• Videotapes
• Assignments
• Examinations
• Suggestions on how to find community resources and how to use them
The five modules are studied over a 15-week semester. This allows roughly three weeks for each module - to do the readings, complete assignments, preview tapes if any, and return assignments to the instructor. If school visitations are to be made or activities tried out in a classroom as part of the assignment, they too, must be completed within that three-week period. Tapes have multiple segments of sample models on them so that several copies of only one tape need be made available. Where possible, students within a reasonable proximity will share tapes. Unlike most correspondence courses, students must return assignments by due dates at the close of three weeks, not at their convenience. The logistics of giving "incompletes" would be too difficult with which to keep track.

Accompanying Module One, are the 1) course syllabus outlining objectives, assignments, examinations, evaluation methods and criteria, 2) book order form, and 3) instructions for mailing assignments.

Module Components
Each module will be organized as follows:
1. Required readings
2. Additional suggested readings, if required
3. Questions based on required readings
4. Thought questions
5. Activity

Sample Activities:
• Conducting activities from the text with children and reporting about them
• Making visitations to gifted classrooms
• Starting a parent group
• Adopting a legislator
• Designing an inservice for teachers, administrators, parents
• Planning a district-wide program prototype for the delivery of programs to gifted K-12 in a rural area
• Previewing tapes and critiquing instructional strategies related to several models

Course Syllabus

Special Education 370
Introduction to Gifted Education
Correspondence Study

Course Description: This course provides a comprehensive overview of the field of gifted education. It covers characteristics and concomitant problems, screening, and identification of all categories of gifted students, program needs, and special concerns and issues in gifted education.

Credit Hours: 3 semester hours

**Course Objectives:** Upon completion of this course, students will:

1. Demonstrate a knowledge of the characteristics of gifted students in general and those unique to each subgroup of giftedness: intellectual, creative, specific academic, leadership, visual and performing arts;
2. Trace the historical development of educational programs for gifted students;
3. Develop a rationale for special education for gifted students;
4. Identify various identification instruments and practices customarily used within programs for gifted students:
   - 4.1 Demonstrate an understanding of the strengths and limitations of each of the assessment and identification procedures, especially in regard to creativity, cultural differences, or handicapping conditions;
   - 4.2 Demonstrate an understanding of the inextricable relationship between philosophy, identification procedures, and programming for gifted students;
   - 4.3 Demonstrate competency in designing a prototype for a local educational agency.
5. Identify different types of organized educational programs available to gifted students.
   - 5.1 Plan educational experiences that will facilitate the gifted student's development and demonstrate knowledge of the most appropriate techniques for that purpose;
   - 5.2 Demonstrate a knowledge of resources available for assistance in the development and implementation of programs for gifted students; and
   - 5.3 Articulate the criteria for selection, utilization and evaluation of sources outside the school that will assist in the implementation of programs for gifted students.

**Course Format:** The course is taught as a correspondence study and permission to take the course is required. Readings and activities focus on practical applications, and relevant assignments will provide a background for understanding gifted youth and their needs.

**Outline of Content:**

I. The Nature of Intelligence/Giftedness/Creativity - Chaps. 1,2,3.

II. Characteristics/Definitions/Screening/Assessments - Chap. 5
   - General intellectual
   - Specific academic areas
   - Leadership
   - Creativity

III. Program Prototypes - Chap. 4
   - Ability grouping
   - Acceleration
   - Enrichment

IV. Curriculum - Chaps. 6,7,8

V. Special Populations/Issues/Teachers - Chaps. 9,10,11
   - Handicapped
   - Economically disadvantaged
   - Culturally diverse
   - Preschool gifted
   - Gifted females
   - Highly gifted individuals
Course Requirements: Evaluation

1. Ten study questions for each of chapters I-10. Questions are to be answered briefly, since answers are a matter of focusing only on relevant ideas and the ability to synthesize them. Answers must be backed by citations from the text. (100 questions X 2 points each = 200 points)

2. Create a district-wide program plan for gifted students in grades K-12 which reflects the principles and concepts of best practices covered in the text. The plan should represent an ideal, not necessarily current practice. You may chose to represent this as a descriptive written product or graphically through a chart. (25 points)

3. Outside reading assignments.
   Review five articles from Roeper Review, Gifted Child Quarterly, Journal for the Education of the Gifted, or other educational journal dealing with one each of the five themes of the course. Each article review should follow the suggested format, be typewritten, double-spaced, and a copy of each should accompany the write-up. Grading will be based upon these criteria:
   (a) The topic chosen is clearly discernible and identified
   (b) Entries are logical and clearly related to the subheadings under which they fall.
   (5 critiques X 5 points each = 25).

4. Mid-term - Five essay questions based on Modules I-III. (5 questions X 5 points each = 25 points)

5. Final Examination - Five essay questions based on Modules IV - V (5 questions X 5 points each = 25 points).

Both examinations are supervised examinations administered at convenient locations.

6. Activities for each module. (Activities receive a grade of S/U and are required).

Criteria: Based on a total points of 200, grades will be determined as follows:
A = 180-200
B = 160-179
C = 140-159
D = 120-139
F = Below 139

Mailing Instructions: Assignments are to be typed and placed in a large manilla envelope. Mail to:
Coordinator Gifted Education
508E Allen Hall/HRE
Box 6122
Morgantown, WV 26506-6122

Sample Module
Module V
Program Prototypes

Readings: Chapter 4 in the Clark text

Study Questions:
1. Briefly distinguish between these administrative alternatives: Ability grouping, Acceleration, and Enrichment.
2. Summarize the research concerning the advantages to ability grouping for the gifted.
3. What is your personal opinion of acceleration such as early school admission, grade
skipping, and/or selective acceleration (acceleration only in certain subjects)? Support your answer.

4. When would cluster grouping be inappropriate for gifted students?

5. Express "less specialized and more specialized" and "mildly gifted and highly gifted" on the same continuum. Do it graphically or narratively.

6. Speculate why some independent study provisions with gifted students fail?

7. Under what circumstances are a) special classes and b) special schools warranted?

8. Why do you think acceleration is so resisted as an option for gifted students in the light of consistent research favoring it? Support your answer.

9. What do you judge to be the most practical information Barbara Clark has written about rural programs for gifted youth and why?

10. Answer the charge that ability grouping will result in elitist group of gifted students?

Thought Questions:

1. Should we identify the children first and then plan a program to meet their needs, or plan a program first and then identify students to fit in?

2. Should we be debating which is better for gifted learners, acceleration or enrichment; or which program structure is best for educating gifted learners?

3. In a small community, there are some advantages which may tend to offset the ability to offer a wide range of services to gifted students. Describe what some of them may be.

Activity:

You have just been employed by a largely rural school district as Coordinator of Gifted Programming. At the present time there is no organized, comprehensive plan from which to deliver appropriate programming to that population. Create a district-wide program plan for gifted students in grades K-12 which reflects the principles and concepts of best practices covered in the text. The plan should represent an ideal, not necessarily current practice in your school district. You may choose to represent this as a descriptive written product or graphically through a chart. The charts on pages 172 and 173 of the text should help you do that. This is the one activity which will receive points instead of S/U.

Sample Midterm

SpEd 370 - Mid-Term Examination

Questions on this examination cover Modules I-III. Answer only five questions. Be thorough.

1. Using the research on the limbic system of the brain, defend the concern which most gifted educators have for the affective development of gifted youth.

2. Some early childhood educators abhor present day pressures to make preschool experiences more academically oriented. What would you say to a teacher who accuses your kindergarten program for gifted children of contributing to that pressure?

3. Define creativity as a function of higher levels of consciousness. Who are its proponents?

4. Relate self esteem to moral development.

5. Of the following groups, which tend to have unfavorable attitudes toward gifted children—teachers of regular classes, community leaders, education administrators, elementary school children, or lay public?

6. Which program options are more likely to be found in the secondary schools?

7. Which of the alternative procedures for identifying culturally diverse learners would be
appropriate for children from rural areas?
8. For each of the characteristics in the federal definition, name ways to assess for it, according to the text, and point out one strength and one weakness of each.

Sample Final

SpEd 370 - Final Examination

Questions of this examination cover Modules IV-V. Answer only five questions. Be thorough.

1. In the following sentence, which phrase refers to "content"; which to "process"; and which to "product"?
   "Through the use of the investigation of primary sources, oral history, and synthesis of information, students will simulate journal writings which explain reasons why the war in Vietnam was unpopular."

2. If you had to sum up the research on the evaluation of programs for gifted in secondary schools, in two sentences, what would you say?

3. Should high school teachers be concerned with process when they are really more responsible for teaching specialized content? Support your answer

4. State the difference between disadvantaged and culturally diverse gifted students.

5. Why not list females in the categories of disadvantaged and/or culturally diverse?

6. Write a few sentences about the characteristics, values, and abilities you possess which would make you well suited to teach gifted youth.

7. Of all the possibilities ahead mentioned by Clark, which do you find most exciting; which do you find most alarming and why?

8. Causes for underachievement fall into three main categories. Explain what they are.

Conclusions
Through appropriate and recent readings, practical assignments and relevant evaluation, teachers of gifted children, potential teachers of gifted children, or regular class teachers with gifted children in their classrooms, can acquire a strong working knowledge of gifted education even though they are in rural areas. Evidence to support that such integrity can be maintained even though not all courses are taken at a university has accumulated. Over the past eight years during which the state has required teachers to take a content specialization test, only one has failed the test in gifted education.
Considerable research and anecdotal evidence suggests that one of our major responsibilities as educators must be to educate parents as well as children (Freeman, 1991; Heath, 1982; Teale, 1981; Teale & Martinez, 1988). Little can be done to end the cycle of illiteracy without beginning with the communities in which our children live. Communities have great potential to influence the actions and interests of their residents. Parents want their children to succeed in school and probably welcome most help that schools or other agencies offer them.

Parent involvement in reading programs is particularly important in rural areas because families are the primary source of education since access to additional educational resources is limited. Children who are not encouraged to engage in reading in the home probably will be less likely to be successful in reading later (Trelease, 1989a). The problem many parents face is not a lack of desire in this endeavor, but in knowing what to do to enable their children to achieve reading success. Programs like Read Aloud West Virginia are showing great success by making parents partners in learning and advocates for family literacy.

Parent Experience
A Department of Defense study conducted in the 1980's determined that the most important factor in determining educational success among 16 to 23 year olds was the educational level of their mothers (Reed & Sautter, 1990). Parents who did not learn to read, who have limited English skills, or who did not experience success in school are less likely to be involved in their children's formal education. For these parents schools are a reminder of their own failure and many feel intimidated when facing their children's teachers.

Parents who do not read to their children do not remember being read to themselves (Johns & Harvey, 1991). Heath (1982) looked at the differences in how parents interact and read to their children in three very different communities. She found that the children from the low SES community had a difficult time taking meaning from books because they had not experienced having stories read to them. However, it was interesting to note that there was a great deal of creativity in language during parent-child interactions.
because the majority of their story telling had been oral. These children told stories that were rich and original because this was the main way for them to get their parent's attention.

Parents seem to understand that they should spend time reading to their young children because of all they see on television and read about it in popular magazines and books (Manning, Manning, & Cody, 1988). However, many parents need more direction in how and what to read. Many researchers feel that book reading interactions between parents and children are different depending on the socioeconomic status of the community (Heath, 1982; Morrow, 1988; Teale, 1981). In a study conducted by Handel and Goldsmith (1988) parents reported that they rarely engaged their children in making inferences while reading, nor did they discuss their own reactions to the story. Children who are read to on a regular basis will independently "reread" familiar books to themselves or others before they learn to read (Teale & Martinez, 1988). This helps to ready them for formal reading instruction. In another 1988 study Martinez and Teale found that there are three types of library books: very familiar, those read over and over in school, familiar, those read once, and unfamiliar, those unread. They found that kindergarteners would choose the very familiar books three times as often and familiar books twice as often as the unfamiliar books.

Getting Parents Started
Parents can be taught how to talk through a story with their children through modeling done in a workshop. The story reader can show them that the discussion should not be limited to what is on the page. Using questions that encourage prediction, providing details, and summarizing should be encouraged in a workshop setting. Programs that work do so because they take advantage of and use the parent's strengths. In communities where parents tell oral stories they should be encouraged to continue the tradition of story telling and then to expand their story telling to include picture books. Picture books can also be an invaluable resource in areas where parents have limited reading skills. Parents can share books with their children and continue telling stories the way they were told during their childhood.

Parents with limited English skills and recent immigrants can be brought into the schools community by demonstrating to them that they have important skills that are needed. Schools that do not have the funds for ESL teachers or books written in a child's native language can start their own foreign language library. Children, with the help of their parents, can write and illustrate a story about their native country or a favorite tale that they were told with their child. Copies can be translated into English by another student or adult who speaks the same language. These stories can then be kept in the library and borrowed by other students and new members of the school who speak that language. This allows all parents to become partners in learning.
Children's literature can have a profound effect on people of all ages. Through literature we learn about our own culture, as well as the culture of others. The written word has the ability to influence our perceptions of people. We learn about history, relationships and emotions through literature. Literature provides educators with a tool to help students develop positive attitudes toward people and cultures which are both similar to and different from their own. It is important for children to experience both in the book that they read. The books marked with an asterisk at the end of this article are ones which may help students learn more about people from various regions of the world and many different cultures.

Parents also need to know what to read to their children. Teachers and other parents should share lists of books that they enjoyed reading to their children. These lists should clearly differentiate between books that should be read to the child and books that the child can read alone (Trelease, 1989a). Children's listening comprehension is much higher than their reading comprehension. Therefore, books read by the parent which are above the child's reading level can and should be enjoyed together. These books may spark an interest in other books that can be enjoyed alone on the child's reading level.

Another issue which should be addressed when introducing reading aloud to parents is questioning technique. Many children who come from low income homes have less experience with open-ended questions such as, "how, why, and when" (Blank, 1975 cited in Morissette, 1991). Children who have not been exposed to this type of questioning may ultimately have a harder time adjusting to school where open-ended questioning is used.

Read Aloud West Virginia
One program which has successfully presented parents with answers to questions about what to read, how to read, and to instill love of reading is Read Aloud West Virginia. This program trains parent/adult volunteers to read to children on a regular basis. To date over 800 adults have been trained including parents, community leaders, and athletes. This program demonstrates to parents and volunteers a simple, inexpensive way to become involved in childrens' education and it demonstrates to the children a love of reading. Volunteers initially attend a one hour workshop to familiarize them with the goals of Read Aloud West Virginia, read aloud methods, and children's books. They are also shown a film about read aloud by Jim Trelease, author of The Read Aloud Handbook. The volunteers then agree to read in a school of their choice one day a week. The whole school and community have the opportunity to get involved in this program. By exposing children to a variety of stories it is hoped that the children will be encouraged to spend more time in free reading activities themselves. Ultimately, the program benefits the parents, the children, and the school by encouraging a love for reading both in school and at home.
Laura Walker, the Monongalia County Read Aloud chairman and member of the State advisory Board believes that the county's program is so successful because the training goes where the need is. "It doesn't matter if there are 10 or 30 parents interested in the program. When a group is interested in a training session we do it". This attitude has seen the program expand from one school in the county to over twenty.

There are coordinators in each area school who are responsible for the volunteers and the program. Many of the books presented provide children with a way to explore experiences, feelings and ideas they already have, as well as new ones. Choosing books with characters which the young reader can relate to helps them to safely explore their own world and build on their experiences. Books can provide a bridge to new places as well by introducing them to unexplored areas. One special feature of the program is author week. During the week there are daily activities in every grade which include listening to books written by the chosen author. This year's author was Cynthia Rylant, a native of West Virginia. Literature kits were put together which included bulletin board ideas, information about West Virginia heritage and curriculum ideas for math, science, and social studies. To add to the children's real story experiences one school posted flyers around the building telling about Mudge, a missing dog who is a character in one of Cynthia Rylant's books. One of the adult readers volunteered her 210 pound Mastiff to play the role of Mudge and the students actually found "Mudge" in the building.

Conclusion
Children need to hear stories; they need to see the people they love enjoy reading to them. They need to have the opportunity to read and to be read to. Programs like Read Aloud West Virginia are a wonderful step in that direction.
References:


Laura A. Reissner West Virginia University
My 101 Personal Favorite Read-Alouds

For Young Children
The Complete Adventures of Peter Rabbit Beatrix Potter
Corduroy Don Freeman
Curious George H.A. Rey
Frog and Toad Are Friends George Lobel
Georgie Robert Bright
Goodnight Moon Margaret Wise Brown
Happy Birthday Moon Frank Asch
If I Ran The Zoo and others by Dr. Seuss
If You Give a Mouse a Cookie Laura Numeroff
The Little Engine That Could Wally Piper
Make Way For Ducklings Robert McCloskey
Millions of Cats Wanda Gag
The Napping House Audrey Wood
Pat the Bunny Dorothy Kunhardt
Peter's Chair Jack Ezra Keats
The Puppy Who Wanted a Boy Jane Thayer
The Real Mother Goose Rand McNally and Company
The Runaway Bunny Margaret Wise Brown
The Silver Pony (A Wordless Book) Lynd Ward
Sheep in a Jeep Nancy Shaw
The Snowy Day Jack Ezra Keats
Tomie de Paola's Mother Goose Tomie de Paola
The Very Hungry Caterpillar Eric Carle
What is It? Tana Hoban

For Kindergarten and Up
Alexander & the Terrible, Horrible, No Good,Very Bad Day J. Viorst
Amelia Bedelia Peggy Parrish
*Angel Child, Dragon Child Michele Maria Surat
*Appalachia: The Voices of Sleeping Birds Cynthia Rylant
*Ben's Trumpet Rachel Isadora
Best Friends For Frances Russell Hoban
*The Black Snowman Phil Mendez
Blueberries For Sal Robert McCloskey
*Borrreguita and the Coyote: A tale from Mexico Verna Aardema
*The Boy and the Ghost Robert D. San Souci
*Branta and the Golden Stone Walter Wangerin Jr.
*Bringing the Rains to Kapiti Plain Verna Aardema
*Cajun Night Before Christmas Trosclaire
Caps For Sale Esphyr Slobdkina
Cloudy With A Chance of Meatballs Judi Barrett
*The Day of Ahmed's Secret F. Parry Heide & J. Heide Gilliland
Doctor De Soto William Steig
*Dragon Kite of the Autumn Moon Valerie Reddix
The Dreamer Cynthia Rylant
The Giving Tree Shel Silverstein
Good Dog, Carl (A Picture Book) Alexandra Day
The Hungry Thing Jan Slepian & Ann Seidler
Ira Says Goodbye Bernard Waber
*Jerusalem Still Shining Kara Kuskin
Johnny Appleseed Steven Kellogg
The Jolly Postman Or Other People's Letters Janet & Allen Ahlberg
The King Who Rained and others by Fred Gwynne
Koko's Kitten Dr. Francine Patterson
*The Legend of the Bluebonnet Tomie de Paola
*The Legend of the Indian Paintbrush Tomie de Paola
Let's Be Friends Again Hans Wilhelm
*Lon Po Po: A Red Riding Hood Story from China Ed Young
Lovable Lyle Bernard Waber
Miss Nelson Is Missing Harry Allard
*Mufaro's Beautiful Daughters John Steptoe
The Polar Express Chris Van Allsburg
*Prairie Night Before Christmas James Rice
*The Rag Coat Lauren Mills
The Stinky Cheese Man & other Fairly Stupid Tales Scieszka & Smith
Stone Soup Ann McGovern
*Strega Nona Tomie de Paola
Tikki Tikki Tembo Arlene Mosel
The True Story of the Three Little Pigs! John Scieszka
The Velveteen Rabbit Margery Williams
*When I Was Young in the Mountains Cynthia Rylant
Where the Wild Things Are Maurice Sendak
*Why the Sun and the Moon Live In the Sky Elphinstone Dayrell

For Older Children
The Black Stallion Walter Farley
Bridge to Terabithia Katherine Paterson
The Call of the Wild Jack London
Charlotte's Web E.B. White
Cricket In Time Square George Selden
Freckle Juice and others by Judy Blume
From the Mixed Up Files of Mrs. Basil E. Frankweiler E.L. Konigsburg
Island of the Blue Dolphins Scott O'Dell
Jacob Have I Loved Katherine Paterson
James and the Giant Peach Roald Dahl
The Jungle Book Rudyard Kipling
Harriet The Spy Louise Fitzhugh
The Hobbit J.R. Tolkien
Little House on the Prairie Laura Ingles Wilder
Mrs. Frisy and the Rats of NIMH Robert O'Brien
The Mysteries of Harris Burdick Chris Van Allsburg
*Number the Stars Lois Lowry
Paul Harvey's The Rest of the Story Paul Aurandt
Ramona the Pest and others by Beverly Cleary
Roll Of Thunder, Hear My Cry Mildred Taylor
Sarah, Plain and Tall Patricia MacLachlan
Scary Stories to Tell in the Dark Collected by Alvin Schwartz
The Secret Garden Frances Hodgson Burnett
*Shiloh Phyllis Reynolds Naylor
The War With Grandpa Robert Smith
Wayside School is Falling Down Louis Sachar
Where the Red Fern Grows Wilson Rawls
The Wonderful Wizard of Oz L. Frank Baum
A Wrinkle in Time Madeleine L'Engle
INTERGENERATIONAL ENTREPRENEURSHIP IN AN EDUCATIONAL SETTING

Today, masses of children are leaving rural schools lacking the skills needed to survive in the competitive job market. This presentation will suggest an innovative project designed to prepare youth for the real world. Currently, Howe-To Industries, an Intergenerational Entrepreneurship Project is being successfully implemented at the John de la Howe School, a state supported institution for at-risk youth in rural McCormick County, South Carolina. The public schools in this area serve a predominantly minority population from families of low incomes. In addition, the public school system is drastically underfunded. Expansion of a program such as Howe-To Industries into the public schools would provide for an innovative means of engaging the community and school system in a mutually beneficial relationship. The purpose of this paper is to relate to rural educators an innovative and easily transferable volunteer intergenerational entrepreneurship project.

Rural Focus

Working-class jobs in rural areas are frequently unstable, low-paying, and seasonal. Unfortunately, the large supply of unskilled workers in these localities almost always exceeds the demand. In addition, these jobs build neither self-esteem nor financial independence. The schools in rural areas, particularly those in the south, have traditionally been underfunded and therefore unattractive to many educators seeking career advancement. Castle (1993) finds that "rural workers suffer deficits in education, cognitive skills, and work experience. Under these circumstances, it is not surprising that rural workers on average have higher rates of unemployment, underemployment, and poverty than their metro counterparts" (p. 47).

Parents of children in rural areas do not see any immediate advantages to their children remaining in school. Therefore, student incentives to invest time and effort in school may be non-existent. Flora, Flora, Spears, and Swanson (1992) assert that in some rural counties, particularly those of low-income located in the South, parents fail to comprehend the relationship between years in school and a higher paying job. Therefore it is necessary to offer the youth in rural schools additional adult role models and a program which emphasizes the importance of learning skills for life time use.

Youth

Adolescence can be a time of confusion related to issues of sexual activity, drug use, and conformity to peer expectations (Hess, Markson, & Stein, 1993). In addition, easy access to illegal substances or weapons, combined with a lack of guidance and psychological resources could potentially lead to detrimental behavior (Levitt, Selman, & Richmond, 1991). A 1989 Carnegie report on educational goals c... healthy adolescent development required growth in the following areas: cognitive, social, physical.
emotional, and moral (Comer & Tisch, 1989). Self-improvement in these areas would seem inherently difficult for the general adolescent population. Compounded with developmental disadvantages such as abuse, neglect, or poverty, self-enhancement would seem nearly impossible.

Freedman (1988) asserts that adolescents may find their access to appropriate adult role models, adequate employment, education and job training, and economic resources restricted. Other researchers have suggested that these factors may play a role in placing the adolescent at risk for the onset of various problematic behaviors such as poor academic performance, teen-age pregnancy, drug use, delinquency, and unemployment (Greenberg, 1977). The problems of at-risk youth are often attributed to their lack of significant relationships. A number of factors have contributed to the deterioration of relationships between at-risk youth and their families. For example, many young people are growing up in single parent families where time to commit to the parent child relationship is often lost as the parent takes on additional employment to pay family expenses. Unfortunately, the task of developing substantial bonds is left to the school. However, Galbo (1986) reported that only a small number of children select teachers as significant others in their lives.

**Intergenerational Programming**

The literature indicates that a large proportion of young people grow up without the opportunity to develop relationships with caring adults (Powell & Arquitt, 1978). Intergenerational programming can serve as an intervention to meet this need as well as allow for changes in negative perceptions and improvement in attitudes between young and old (Chapman & Neal, 1990). Older adults have the capacity to play unique and valuable roles in the lives of adolescents. They can help adolescents develop positive identities by providing the historical continuity which is essential for a fully integrated sense of self (Mead, 1974).

Coleman (1973) suggested that the work environment provides an opportunity for youth to develop significant bonds with older adults. However, this seldom happens (Greenberger and Steinberg, 1986). They suggested that the failure to form these bonds can be attributed to the nature of the work environment which tends to remain age segregated. Furthermore, few adult workers are interested in forming significant bonds with younger workers. Added to this situation is the fact that in many of the low paying jobs held by youth, the adolescents are generally supervised by same age peers and therefore have little contact with older adults. It would seem the work environment would be an effective arena for intergenerational contact only when older workers are willing to interact and share their skills with younger workers.

Youth may be particularly receptive to older individuals in an employment setting when they realize that job skills are crucial to future success. In addition, two issues are important when considering employment opportunities for adolescents: availability and preparedness. If youth perceive older individuals as a valid source for assisting in job preparedness, it is likely meaningful relationships will form. Indeed, older adults bring
many skills to intergenerational programs, and job related skills may be among the most crucial. Teaching youth skills needed to successfully compete in the job market may be one of the most valuable assets older volunteers can impart to youth.

Freedman (1988) identified five outstanding intergenerational programs involving at-risk youth and elder mentors. The various programs involved teenagers who were jail-bound, pregnant, single mothers, or in danger of failing or quitting school. After interviews with forty-seven pairs of elders and youth, Freedman concluded that thirty-seven had significant relationships which provided benefits to both people. Freedman also outlined several principles necessary for programs which aim to encourage the development of significant intergenerational relationships. These specific program characteristics included: provision of opportunities for one-to-one contact; bringing elders and youth together for completion of meaningful tasks; having the elder and youth pairs meet frequently and consistently for sustained time periods; making open-ended commitments, and meeting in an environment conducive to privacy and openness.

The youth in Freedman's study reported improvements in their daily living and described how they had learned numerous skills from their mentors. It seems logical then, that the resources of older adults, which are derived from their life experiences and professional developments, make them well-suited to volunteer with children (Freedman, 1988). Additionally, the mutual needs and shared characteristics of both groups create closer bonds between the elders and youth (Cherry, Benest, Gates, & White, 1985). Elders in Freedman's study agreed that there was a shared marginal status which enabled a special empathy between the two parties and better facilitated unguarded interaction.

Chambre (1987) noted that volunteers should be included in the planning, as well as the operation of the program. "Howe-To industries" is unique in that it allows participants to assume responsibility for a variety of tasks such as sales, scheduling, product development, inventory control and budgeting. This project unlike its predecessors was designed to include volunteers in the development of the project as well as its administration. The design also calls for reciprocity as opposed to one-sided learning.

**John de la Howe School**

"Howe-To Industries" involves at-risk youth from ages six to seventeen from the John de la Howe School in McCormick, South Carolina. The school was established in 1797 in accordance with the will of Dr. John de la Howe as an institution to provide housing and agricultural training to poor and orphaned children. The school came under direct control of the state legislature in 1918 as South Carolina's only state supported children's home. Currently, the school functions as a long term residential treatment facility for male and female adolescents with a variety of behavioral and emotional problems. It is located eight miles northwest of the city of McCormick and has as its objective the provision of a therapeutic environment for youth to rehabilitate, then successfully re-enter their communities. The average length of stay for the students is eighteen months.
Volunteer Mentors

Senior adult volunteers serve as mentors in "Howe-To Industries." They are ages fifty and older and live in one of two places in McCormick. Approximately half are new residents to McCormick County, living in the Savannah Lakes Village, which opened in 1989. This retirement community calls for the establishment of 5,100 homesites, which will more than double the size of the population in the county when all sites are inhabited. Currently, around two hundred homes have been built. The retirement community boasts many facilities including a golf course, restaurant, visitors center, condominiums, and single family homes. The residents are primarily white, affluent, and not South Carolina natives.

The other mentors are long time residents of McCormick who have lived there for over five years, however the majority of these older adults have lived their entire lives in the county. At present, there are approximately 1,162 adults over the age of 65 in the county. This is an increase of 35% since 1980. McCormick is the smallest county in South Carolina with a population of 8,868, approximately 58% of which are African Americans. McCormick also ranks as one of the poorest counties in the state with a median household income of $19,226.

Currently, there are a total of thirty-seven active older volunteers involved in Howe-To Industries, with an equal ratio of Savannah Lakes Village residents to long time residents. The Savannah Lakes Village residents tend to be younger, more educated, and more affluent relative to their long time resident counterparts. In addition, the group of new retirees tends to be balanced with regard to gender, which is in marked contrast to the predominantly female group of long time residents.

Description of Program

Howe-To Industries Volunteer Project

Funding from the AARP Andrus Foundation enabled the establishment of Howe-To Industries through the addition of older adult volunteer mentors to an existing enterprise market program at the John de la Howe School. The objectives of this project are to improve and enrich the lives of elderly participants and at-risk youth simultaneously. It is anticipated that through this project, both groups will experience an increased quality of life and a stronger sense of community.

Howe-To Industries operates from the "BARN", the school's renovated dairy barn, which has been dubbed "Building Adult Responsibility Now." By operating a country market in the barn, youth are introduced to the ideas of small business development by volunteer mentors. The diversity of life experiences among the mentors gives youth from disadvantaged backgrounds opportunities to develop social and functional life skills. They decide upon and manufacture their own products, learn advertising and merchandising techniques, and sell their goods and services as members of "companies" in Howe-To Industries. All of this is achieved through actual hands-on experience. By investing their time and energy in entrepreneurial activities, students are able to earn money and enhance their self-images, for perhaps the first time in their lives.
A total of fourteen housing units on the John de la Howe campus comprise seven different companies within Howe-To Industries. An in-migrant retiree, a long time resident, a child, and a school staff member is incorporated into every component of running the business. The one-hundred and ten at-risk youth therefore, are given the opportunities to acquire practical business skills which are often neglected, particularly in rural schools. In essence, the students of John de la Howe are learning the fundamentals of free enterprise while developing key interpersonal skills from caring, experienced older individuals.

The Howe-To Industries organizational structure is extremely functional, yet simplistic in that it can be easily replicated in other educational settings. There is a policy board which includes representatives at the county and state level. There is also an executive committee, a board of directors, and the volunteers, youth, and staff who are company members. In addition, each participant in Howe-To Industries has the opportunity to join one of the businesses' six working committees. They are the accounting, staffing and transportation, product involvement, activities and events, training and evaluation, and marketing.

Initially, each company was given a "start up" fund in a line of credit to begin company operations. Companies make decisions on the products they wish to produce as well as the prices they choose to ask. They then present their product ideas to the product involvement committee and if accepted, they contract with Howe-To Industries. Companies produce the products for which they contracted and sell their products to Howe-To Industries. Next, the board of directors issues a receipt and money is transferred from Howe-To Industries to the company's fund. Companies then distribute their profits or adjust for losses.

The inclusion of the older adults as mentors in this program facilitates the passage of vast knowledge and skills accumulated during a lifetime, while at the same time encouraging friendship and a greater understanding among all participants. Recent market products made by older adults and youth have ranged from gourd bird houses, to mailboxes, to hand-made quilts. The Activity Therapy Coordinator at the John de la Howe school attests to the therapeutic benefits of Howe-To Industries: "...caring and learning relationships have been established between [our] students and the older adult volunteers. The students are proud of the skills they learn and show respect for the senior volunteers by their attentiveness and good behavior."

Transferability

With the great needs and lack of opportunities for youth in rural areas, intervention by rural educators is imperative. Some of the more obvious applications of a program like Howe-To Industries center around the teaching of valuable entrepreneurial skills. These skills include development of advertising and merchandising techniques, manufacturing of products, communication and decision making, and other fundamentals associated with free enterprise. Skills learned through this type of program can be carried
into adult lives, regardless of students' occupational choice. This program includes older adults as mentors but other community volunteers could also be utilized. The anticipated outcomes of participation in this project include an increased quality of life, development of a stronger sense of community, and enhancement of self-images for all involved. Mentors are the envoys of knowledge and skills that the youth may otherwise be without.

An intergenerational program such as Howe-To Industries is easily transferable to a rural community. Howe-To Industries was developed specifically with a rural environment in mind. The John de la Howe's renovated dairy barn provides the perfect location for the establishment of the country market. However, other community buildings such as gymnasiums, store fronts, and school facilities could also be used. Encouragement and development of strong relationships between school and community are especially important in a rural area. A program with an intergenerational and an entrepreneurship component can contribute greatly in the formation and maintenance of healthy community relations. Through participation in the program, citizens can become directly involved in the education process. Furthermore, the general populace can be exposed to the school and its young entrepreneurs through visits to the market.

Essentially the most important elements required to start the project are a project coordinator, a place to set up a market, volunteers, and the imagination, innovation and industry of the children. Some initial "start up" money will be needed. However much of this can be obtained through donations, loans, or a variety of other funding sources. In addition, since the market generates profits, all monies can be eventually recouped. A volunteer, teacher, or recreation professional can serve as the project coordinator until one can be hired.

Conclusion

Adolescents today face a diverse array of developmental challenges. Many of the problems faced by youth can be attributed to a lack of significant relationships. However, the implementation of a well-planned intergenerational program provides the perfect opportunity for the formation of meaningful relationships between adults and youth. Adolescence is a time of confusion related to a desire to conform to peer expectations. The school system, although adept in promoting some types of intellectual growth, often falls short in the areas of practical, social, and emotional development. However, development in these areas may be facilitated through a process of interaction with suitable adult role models, in a setting providing real-life working skills. A project such as Howe-To Industries can be self-supporting, as well as initiated and maintained with little difficulty.

The Howe-To Industries project at John de la Howe School, although still in its early stages, has provided an easily replicable model for instituting an intergenerational entrepreneurship program. The benefits of this program are tremendous. To the youth, valuable life and business skills are obtained from caring adult support figures. The pool of resources provided by their older mentors gives children a broad learning base and serves to dissolve age and racial stereotypes.
References


Deaf Education
Using Interactive Television

After studying the technologies available in the state, the University of Kansas Medical Center personnel determined that compressed video, also referred to as interactive video, offered the most cost-effective approach for medical and educational contact with rural and remote areas of the state. Compressed video was selected because special networks (e.g., dedicated leased lines or fiberoptics) were not required. Instead, compressed video utilizes commercial common-carrier telephone services available in Kansas, nationally and internationally. The K.U. Medical Center program operates on the state KANS-A-N network using the equivalent of six simultaneous long-distance telephone (voice) calls. Thus, compressed video provides the opportunity for virtually unlimited access throughout the state of Kansas. The system provides two-way interactive audio and color video communication between two or more locations. Currently between 8-10 sites can utilize the system.
The KUMC terminal is a fixed camera-recorder-transmitter installed in a conference room at the hospital. The system includes a camera-recorder-transmitter mounted on a rotating platform that permits it to be directed to individuals or small groups seated in the room. The system has a fully interactive audio/video link that permits face-to-face conversation and visual evaluation of material (e.g., videotapes, transparencies, book pages, evaluation tools, etc.)

The technology provides rapid, high-resolution audiovisual transmissions. Using this technology, KUMC educators can talk with, listen to, and see their students and colleagues throughout the state. A video recording can be made at either end of the system, including two-way audio. The system's capability to facilitate educational offerings and conference discussions is immense.

Practical questions have focused on whether or not this system is a satisfactory alternative to "real" lecture and demonstration with students. Is it functional for the professor, and is it acceptable to the
METHODS

Subjects

A total of 13 graduate students, registered in two different courses, (taught by two different professors) and enrolled in the deaf education program at a Midwestern university in the fall, 1992, served as subjects for the study. Group I consisted of eight urban students and two rural students. Group II consisted of two urban students and one rural student. Both classes utilized simultaneous communication during instruction and social interaction.

All subjects who participated in the present study had earned an undergraduate degree. One also held a masters degree. Subjects ranged from 22 to 53 years of age. All but one were males: one was deaf. Six were married. Two had small children. Subjects were enrolled in 3 to 18 hours of graduate hours of study, including one or both of these courses. Eight students were employed in addition to attending school (four as teachers) and worked 10 (four subjects) to 40 (four
subjects) hours a week. Rural students lived in towns of 5,000 to 20,000 citizens and indicated that they could not have taken the course if it had only been offered on the main campus. As it was, rural students drove 5 to 160 miles to attend the course at the site with compressed video capabilities nearest them.

Procedure

Subjects enrolled in the fall, 1992 courses provided responses to Leiker scale ratings ranging from 0 to 5 (5 = strongly agree) for questions on a Tele-Education Evaluation tool developed by Allen (1992). Rural subjects responded to 16 rated and one open-ended question; urban subjects responded to 15 rated and one open-ended question. An additional five questions (i.e., 18-22) were rated or answered only after the final interactive video class. Group I responded to the survey in weeks 13 and 14 (of a 15 week course schedule), after having initiated the use of interactive video in week 12. Group II responded to the survey in weeks 12, 13, and 14 (of a 15 week course schedule), after also having initiated the use of the interactive video capabilities.
in week 12. Instructors (n=2) provide responses to Leiker scale ratings ranging from 0 to 5 (5=agree) for questions developed by the author that paralleled those asked on the Allen (1992) instrument.

In the fall, 1993, three new graduate students enrolled in one of the courses reported in this paper. The course was offered to three local students and three rural students using compressed video. At the termination of the course, the three rural students were asked to complete the demographic and post survey that the students enrolled in the course the previous year had completed.

Results

Subject ratings were averaged a) across courses, b) comparing courses, and c) with regard to the perspectives of rural subjects agreement on questions 2,3,4,5,10,13 and 14, giving program means between 1.1 and 2.0. That is, subjects generally agreed that the camera and monitor were not distracting, that being on "TV" did not make them feel self-conscious, that it wasn't hard to ask questions during class, that the professor didn't spend
too much time attending to the "other" (rural or urban) group, that the audiovisual materials were presented adequately, and that they didn’t find it difficult to concentrate.

The average of all subjects on questions 11 (it was harder to participate in discussions than compared to the standard classroom) was also a rating of disagreement (mean of between 2.1 and 3.0).

The average of all subjects on questions 11 (it was harder to participate in discussions than compared to the standard classroom) was also a rating of disagreement (mean of between 2.1 and 3.0).

The average of all subjects on questions 6 and 15 was a rating mean of agreement between 3.1 and 4.0. The rating of Question 6 judged seating to be comfortable. The rating of Question 15 indicated that the televideo equipment did not interfere with learning.

Five questions were rated in high agreement (with program means between 4.1 to 5.0). That is, subjects generally agreed that the course material was covered well, that the lighting was good, that they could hear
well, that the instructor was well-prepared, and that the visual aides used were useful. See Table 1.

\begin{tabular}{|c|}
\hline
\textbf{Table 1 about here} \\
\hline
\end{tabular}

When Group I (Deaf Studies) and II (Methods of Teaching Elementary Students Who are Deaf and Hard-of-Hearing) were compared, ratings indicated agreement of nine questions: 1, 3, 10, 14 (1.1 to 2.0), 11 (2.1 to 3.0), 6 (3.1 to 4.0) and, 7 and 9 (4.1 to 5.0). Responses to six questions differed (by one category in all cases). These were 4, 5, 8, 12, 13, and 15. See Table 2.

\begin{tabular}{|c|}
\hline
\textbf{Table 2 about here} \\
\hline
\end{tabular}

Group I and II pre/post ratings using interactive video showed agreement in the ratings of nine questions 2, 3, 10, 14 (1.1 to 2.0), 11 (2.1 to 3.0), 6 (3.1 to 4.0) and 1, 7 and 9 (4.1 to 5.0). Responses to six questions were rated differently (by one category in all cases). These were 4, 5, 8, 12, 13, and 15. Overall, Group II indicated more satisfaction with the televideo class than did Group I subjects.
Responses of rural subjects were compared to those of urban subjects in Group I. Agreement was demonstrated in the ratings of 12 questions: 1, 2, 4, 5, 6, 7, 9, 10, 13, 14, 15, and 16 (See Table 4). Subjects rated four questions differently. These were questions 1 (course material covered), 7 (lighting), and 13 (manner AV was presented). These questions differed by one category in all cases (See Table 4).

Table 3 about here

Responses of rural subjects were compared to those of urban subjects. Group I showed agreement on the rating of 11 questions: 2, 3, 4, 5, 6, 8, 9, 10, 12, 14, and 15 (See Table 4). The subjects rated four questions differently. These were questions 1, 7, 11, and 13. These questions differed by one category in all cases (See Table 4).

Table 4 about here

Responses of rural subjects were compared to those of urban subjects, within Group II. Agreement was
demonstrated on the ratings of 12 questions (See Table 5). The subjects rated four questions differently. These were questions 3, 8 (ability to hear), 11, and 12 (usefulness of AV). These questions differed by more than one category in all cases (See Table 5).

Table 5 about here

Responses to the instructor's survey demonstrated high agreement between the instructors (See Appendix B). They rated questions 1, 2, 3, 5, 9, 11, 12, and 12B in exact agreement. Their ratings differed by one on all other questions except #6 (seating was comfortable). Instructor A strongly disagreed with this statement; Instructor B gave the item a menial response.

The responses of three female rural students enrolled in the Deaf Methods course in the fall, 1993, were asked to complete only the post course survey. These responses were highly similar to those from rural students provided in the previous year. Student 1 was a teacher of gifted students, who had completed 27 hours towards certification in deaf education. She drove 35
miles to attend the course at a site located approximately 150 miles from the host site. The other two teachers had completed six hours in the deaf education program and drove 30 and 35 miles, respectively to attend class. One of these sites was 100 miles and one was approximately 400 miles from the main campus. All three students indicated some difficulty with asking questions, participating in discussions, and using audiovisual materials as compared to a traditional course. Two students indicated that they felt somewhat self-conscious being "on TV".

Discussion

Teaching core courses that are essential to become a certified teacher of the deaf using interactive video technology was a successful experience for the graduate students enrolled in two courses taught from a Midwestern university. Overall, subjects rated questions requiring a low rating with a 2.0 - 3.0 rating, indicating satisfaction, and questions that required a high rating with a 3.1 - 5.0 rating, also indicating satisfaction.

Students in Group I (Deaf Studies) were more self-
conscious about being "on T.V." and about asking questions than those students in Group II. Group I had more technical problems with sound than Group II and found the audio-visual materials less useful. They also had problems with the audio-visual screen. In general, Group I students were able to learn slightly better than Group II students using the televideo classes, but both groups gave high ratings to the format (X = 4.1 to 5.0).

Rural students in each separate class, as well as averaged across courses, change their opinions about the use of the televideo technology in a positive direction within a short period of time (Tables 3,4,5). They gave slightly lower ratings (3.1 to 4.0) to being able to learn from the televideo courses compared to traditional classrooms than did the overall group (4.1 to 5.0). Yet, one rural student commented that, "The tele-education connection helped me a great deal. It made me feel more a part of the course...It worked very well for me." Another commented, "Taking the course in this manner was much better than a correspondence course format. Being able to directly speak to the instructor and other
students was a crucial part of the class for me."

Two books that instructors new to this technology may find useful are:

REFERENCES
Table 1 Group means for questions across courses (Group I + Group II)

<table>
<thead>
<tr>
<th>Rating Possibilities</th>
<th>Questions</th>
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<td>1.1 - 2.0</td>
<td>[11]</td>
</tr>
<tr>
<td>2.1 - 3.0</td>
<td>6*, 15*</td>
</tr>
<tr>
<td>3.1 - 4.0</td>
<td>1*, 7*, 8*, 9*, 12*</td>
</tr>
<tr>
<td>4.1 - 5.0</td>
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[ ] low rating indicated satisfaction
* high rating indicated satisfaction
Table 2
Agreements and Disagreements
For Group I and Group II

Agreements

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<tbody>
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<td>7</td>
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</tr>
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<td>10</td>
<td>6</td>
<td>9</td>
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Disagreements

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<td>[4] [5] [13]</td>
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<tr>
<td>1.1 - 2.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1 - 3.0</td>
<td>[4] [5] [13]</td>
<td></td>
</tr>
<tr>
<td>3.1 - 4.0</td>
<td>8* 12*</td>
<td></td>
</tr>
<tr>
<td>4.1 - 5.0</td>
<td>15*</td>
<td>15* 8* 12*</td>
</tr>
</tbody>
</table>

[ ] low rating indicated satisfaction
* high rating indicated satisfaction

Question 4: Group I was more self-conscious about being "on T.V."

Question 5: Group I had a harder time asking questions

Question 8: Group I could hear less well

Question 12: Group I found the audio-visual materials less useful

Question 13: The video-screen presentation was worse for Group II

Question 15: Group I was able to learn better than Group II in the televideo class
Table 3
Pre-Post Agreements and Disagreements for Rural Subjects Rating in the Program

Agreements

<table>
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<tr>
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<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Post</td>
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Disagreements

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<tr>
<td>4.1 - 5.0</td>
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</table>

Question 3: The presence of the monitor became less distracting

Question 8: Ability to hear improved

Question 11: Ability to participate in discussions worsen

Question 12: Audiovisuals become more useful
Table 4
Pre-Post Agreements and Disagreements for Rural Subjects Ratings for Group I (Deaf Studies)

Agreements

<table>
<thead>
<tr>
<th></th>
<th>2</th>
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<th>14</th>
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<td></td>
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<tr>
<td>4</td>
<td>8</td>
<td>12</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Question 1: Course material was better covered
Question 7: Lighting improved
Question 11: Ability to participate in discussion decreased
Question 13: The manner of presenting audiovisual materials worsened
Table 5
Pre-Post Agreements and Disagreements for Rural Subjects
Rating for Group 2 (Deaf Methods)

<table>
<thead>
<tr>
<th>Agreements</th>
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</thead>
<tbody>
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<td>13</td>
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<td>15</td>
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<table>
<thead>
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</thead>
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<tr>
<td>2.1 - 3.0</td>
</tr>
<tr>
<td>3.1 - 4.0</td>
</tr>
<tr>
<td>4.1 - 5.0</td>
</tr>
</tbody>
</table>

Question 3: The presence of the monitor became less distracting
Question 8: Ability to hear improved
Question 11: Ability to participate in discussion decreased
Question 12: Audiovisuals became more useful
**TEACHER RATING**

*Use 1 - 5*

disagree  agree

<table>
<thead>
<tr>
<th>Instructor A</th>
<th>Instructor B</th>
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</thead>
<tbody>
<tr>
<td>5</td>
<td>1. Covered material in the televideo class to the same degree that you'd have covered it in a traditional class.</td>
</tr>
<tr>
<td>2</td>
<td>2. The camera distracted you.</td>
</tr>
<tr>
<td>1</td>
<td>3. The monitor for the other class distracted you.</td>
</tr>
<tr>
<td>2</td>
<td>4. Being &quot;on TV&quot; made you feel self-conscious.</td>
</tr>
<tr>
<td>1</td>
<td>5. You had a hard time asking questions.</td>
</tr>
<tr>
<td>1</td>
<td>6. The seating was comfortable.</td>
</tr>
<tr>
<td>4</td>
<td>7. The lighting was good.</td>
</tr>
<tr>
<td>4</td>
<td>8. You could hear the other class ok.</td>
</tr>
<tr>
<td>5</td>
<td>9. You felt as well-prepared as you would have if you had been teaching in the traditional format.</td>
</tr>
<tr>
<td>4</td>
<td>10. You did not spend too much time dealing with the outreach course</td>
</tr>
<tr>
<td>3</td>
<td>11. You felt it was harder for both groups to join in on discussion.</td>
</tr>
<tr>
<td>5</td>
<td>12. You use audiovisuals.</td>
</tr>
<tr>
<td>5</td>
<td>12B. You found audiovisuals useful.</td>
</tr>
<tr>
<td>2</td>
<td>13. Presenting audiovisuals in the video-screen was worse than the chalkboard usual overhead.</td>
</tr>
<tr>
<td>1</td>
<td>14. You found it difficult to concentrate.</td>
</tr>
<tr>
<td>2</td>
<td>15. It was hard to interpret.</td>
</tr>
<tr>
<td>2</td>
<td>16. It was hard to understand the signing of the rural site.</td>
</tr>
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A COMPARISON OF TRADITIONAL AND DISTANCE EDUCATION MODELS

Introduction

The preparation of personnel to serve students with disabilities in the nation's schools is a problem fast approaching crisis dimensions. Federal agencies and professional associations alike recently have warned of an impending major shortage in special education personnel (United States Department of Education 1988; 1989; 1990). The problem is especially severe in rural areas, where the attrition rate for special educators may be as high as 100% every three years (Bina, 1981; Helge & Marrs, 1982; Reetz, 1988). The need for teachers trained to work with students with low incidence handicaps, including those with severe/profound/multiple disabilities is particularly great. Position vacancies and numbers of uncertified personnel are consistently higher in the areas of Severe/Profound Mental Retardation or Multiple Disabilities and Early Intervention (Bricker & Filler, 1985; Marozas & May, 1988). There is an insufficient supply of newly trained personnel to meet the current and continuing demand for teachers. And, since the attrition rate due to "burnout" is high for teachers who face the variety of special challenges associated with severe disabilities (Lehr, 1990), positions are continually reopening. It is essential, therefore, for personnel preparation programs to train additional teachers to meet the continuing need for educators in this area of specialization.

Prospective and practicing, but uncertified, teachers need more accessible training programs, especially in rural areas. As the demographics of the college/university student population continues to change, personnel preparation programs must be adapted to accommodate the needs of nontraditional students, many of whom live at significant distances from the campus, and have job and family responsibilities that prevent full-time study (Rose, 1989). Distance learning models use communications technology to make college/university training programs accessible to larger numbers of students in even remote rural locations. Special education personnel preparation programs in several rural states have adopted distance learning models to train special education teachers on-the-job that use high-tech solutions such as satellite broadcasts, computer networking, and other television formats (Beare, 1989; Condon, et al., 1989; Egan, et al., 1989). Yet, little is known about the relative benefits and drawbacks of such technology-based programs for teacher education in special education, especially with respect to their cost-effectiveness in comparison with more traditional personnel preparation programs.

It was determined to modify the existing graduate degree and certification program in Severe/Profound Handicaps at West Virginia University (a low incidence handicaps program with prospective students scattered across a wide and largely remote rural area) to make effective use of the West Virginia satellite network to improve the accessibility of training to prospective and practicing special education teachers in rural areas throughout West Virginia and surrounding region. The WVU Distance Learning Project was designed to use a distance learning model to offer a training program for teachers that develops competencies in state-of-the-art program design and delivery for individuals with severe/profound/multiple disabilities in local schools schools and other community agencies. Project staff kept data on costs of the program related to personnel and delivery costs as well as program outcomes in terms of number of trainees, in order to compare the effects of the distance education model with the programs previous models (including campus-based and field-based delivery systems). These data were compared with departmental financial and productivity records available from previous years of the Severe/Profound Handicaps program operation.

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Dept. of Special Education
West Virginia University
Morgantown, WV 26506
Program Evolution

The Severe/Profound Handicaps Program at West Virginia University has evolved over the last 15 years to address the changing training needs of educational personnel in this very rural state. In 1978 the faculty of the Department of Special Education at West Virginia University initiated a new graduate level program leading to a Master's degree and teaching certification for service to children, adolescents, and adults with severe/profound mental retardation, physical or sensory impairments, multiple handicapping conditions, serious challenging behaviors, and/or dual diagnosis. In its first phase (1978 - 1980 followed by a program hiatus from 1980 through 1983 due to faculty turnover), this campus-based program made no accommodations for individuals employed in community settings, offering only campus-based courses and practicum experiences. All trainees were supported by tuition waivers and living stipends provided in the form of university traineeships funded by a federal grant. During this two year period, only 12 trainees completed the program.

To address university concerns about low program enrollments and a growing demand for training by personnel in outlying rural areas, the second phase of the program employed a field-based model from 1983 - 1991. Specially trained field-based instructors working under the supervision of faculty delivered coursework at six regional sites around the state (average trainee travel time 45 to 120 minutes) through bi-weekly evening class sessions, while university supervisors provided on-the-job practicum experiences in the trainee's own job setting. Grants from the state education agency allowed all courses to be offered with tuition waivers to minimize trainee expenses. During this phase, 93 trainees completed the second phase in four two-year cycles.

As the number of trainees continued to increase and as personnel were needed in increasingly remote areas of the state, faculty implemented a distance education model in the third phase of the program in Fall 1991. Using satellite telecourses broadcast to local sites (average trainee travel time 20 to 45 minutes) and on-the-job supervision of practicum experiences, one faculty member and two doctoral level graduate assistants provide all coursework and practicum experiences to trainees in their home communities. Tuition waivers and stipend reimbursements are made available through state and federal grants to help trainees with the costs associated with participating in the program. To date, some 120 trainees are enrolled in the program; 13 trainees completed all program requirements in 1993-1994, with 25 scheduled to finish by August 1994, another 30 by August 1995, and a final group of 35 by 1996 (in overlapping three year cycles). The distance education model also allows the program to incorporate another 8-10 campus-based students pursuing full-time study; these students attend classes in the broadcast studio and complete practica in local schools and agencies.

Description of the Severe/Profound Handicaps Program

Structure. The Severe/Profound Handicaps Program at West Virginia University is a graduate program leading to the Master's degree in Special Education as well as West Virginia teaching certification in Severe Handicaps (nongraded) and/or qualifications for mental retardation personnel (adult services. Trainees may pursue certification only, degree only, or combined certification and degree program options in the distance education program, all without ever needing to travel to campus.

Eligibility. Trainees must meet all requirements for admission to graduate study at West Virginia University, including an undergraduate degree in any area with a Grade Point Average of 2.5 or better from an accredited institution of higher education. Prior training or experience in education or a related area, although desirable, is not necessary. Trainees who are employed on a full-time basis to provide direct service to children, adolescents, or adults with severe or multiple disabilities in school systems or other community agencies in West Virginia are eligible for tuition waivers and stipend reimbursements to cover costs associated with participating in the program. Trainees who are not currently employed or who have positions outside the state may participate.
by paying full tuition and fees. Trainee financial assistance has been made available through a combination of state and federal grants for personnel preparation.

**Program Content.** The program requires completion of 30 semester hours of coursework and practicum experiences for certification and an additional six hours of elective credits for the degree. The program was designed to prepare professional educators to provide state-of-the-art early intervention services in home-based, center-based, and integrated settings through collaboration with family members, professionals from other disciplines, and service agencies.

**Program Courses.** The eight required courses include:

- SPED 327 Assessment: Developmental Handicaps
- SPED 328 Instructional Programming: Developmental Handicaps
- SPED 322 Characteristics and Methods: Physical Handicaps
- SPED 323 Family/Professional Consultation: Developmental Handicaps
- SPED 324 Communication Intervention: Developmental Handicaps
- SPED 320 Curriculum: Severe Handicaps
- SPED 325 Secondary/Adult Programs: Severe Handicaps
- SPED 329 Managing Challenging Behaviors: Severe Handicaps

The requirements for every course include active class participation in a variety of simulation and discussion activities (e.g., writing behavioral objectives, roleplaying a parent conference, practicing test administration), completion of an applied project requiring trainees to conduct some activity related to course contact with an actual young child with a delay or disability (e.g., design, implement, and evaluate an augmentative communication program; critique a daily instructional schedule; construct an adapted material), and complete two essay exams involving application of course principles and practices to real or hypothetical cases (e.g., outline the design of a family training program; critique and rewrite curriculum goals; design of an augmentative communication system). The program relies heavily on the case method in recognition of its importance in developing skills for practical application of theory, reflective decision making, and appreciation of the sociocultural and ethical complexities of working with children and families.

**Practicum Components.** Each trainee completes an individualized practicum plan outlining the activities and documentation that will be used to demonstrate competencies. Trainees may submit a product for review by the supervisor (e.g., instructional material, written IFSP form, parent newsletter), submit a video- or audio-tape recording of an activity that cannot be witnessed directly (e.g., home visit, assessment battery administration), arrange for the supervisor to observe an activity (e.g., small group lesson, positioning routine), or provide written documentation from another qualified observer (e.g., principal, physical therapist). The supervisor is responsible for approving the practicum plan, verifying all documentation assembled in the trainee's portfolio, rating the trainee's performance, and assigning a grade for completion of practicum requirements. Supervisors are assigned six trainees to supervise per .25 FTE time assigned to the program; to reduce travel time and costs, supervisors are responsible for trainees in geographic clusters.

**Distance Education Delivery System**

The Distance Learning Model has been designed to incorporate state-of-the-art delivery techniques recommended in the professional literature. Effective distance learning incorporates the following features: 1) use of a live teleconference delivery system with an audio bridge to allow continuous contact between instructor and students, the format most similar to traditional instruction (Garrison, 1980); 2) planned opportunities for interaction between instructor and students using discussion and activities to similar traditional classroom dynamics and promote active learning (Anderson, 1989); 3) maximum use of visual presentation methods and materials (Bates, 1987); 4) comprehensive and well-designed course support materials that present content in clear, readable language, study guides to draw attention to key points and stimulate...
student critical thinking, formats designed to motivate students and promote active learning, and detailed guidelines for satisfactors performance (Keegan, 1990); 5) immediate, consistent, and informative feedback on student performance via grading of assignments and exams (Howard, 1987); and effective administrative organization and coordination to maximize student satisfaction and program completion (Rowntree, 1986). Attention to these criteria during planning and implementation ensured that the project used the distance learning model effectively to promote student knowledge and competency acquisition.

**Telecourse Broadcasts.** Each course is delivered as a live interactive telecourse broadcast via C-band satellite from the television studio at West Virginia University in Morgantown (northern part of the state) and relayed by microwave to the state's only C-band uplink facility in Institute (southern part of the state). Campus-based students attend class at the television studio, while all other students attend at some 30-40 public downlink sites around the state. Downlink sites generally are located at local community colleges, private colleges, and public colleges and universities, at local high schools ot vocational-technical schools, or in public libraries or other community service centers. Downlink sites must have a satellite dish, C-band capable receiver, television monitor, telephone, and seating for participants. Although sites may vary from semester to semester depending upon trainee locations, most trainees attend the same site throughout the program; the average number of trainees per site is 3-5, although a few sites occasionally attract more than 10 trainees, and a handful of trainees attend sites alone. Courses are offered at the rate of one per semester and one per summer so that trainees can complete all coursework within a three year period. Each weekly class session consists of a two-hour live broadcast from 6:00 p.m. to 8:00 p.m. with telephone linkages with the distant sites for questions, discussion, and in-class activities. The broadcast is followed by a 45 minute call-in audio segment in which distant site participants can use an #800 telephone number to contact the instructor for help with course content, assignments, or other advising concerns. The instructor and graduate assistants also are available for telephone contact throughout the week during daily office hours.

**Telecourse Components.** Each telecourse consists of 12-15 weekly broadcast sessions conducted by an member of the graduate faculty who engages participants in lecture, discussion, individual activities, and group activities much the same as would be found in any other graduate level course. Presentation methods include lectures; live and taped demonstrations; guest interviews with content experts, state leaders, working professionals, and family members; and commercial and instructor-developed videotapes of early intervention programs, personnel, and practices (in collaboration with local families and agencies). Interaction methods to enhance trainee participation include discussions; case studies; experiential activities such as simulations, role plays and guided practice. When studio class trainees interact, they appear on screen; trainees at the distant sites are heard over the phone by all participants and are identified by name and by site. Trainees purchase a course packet that contains all materials needed for the course (except for the textbook): syllabus; directions for assignments and exams; lecture notes, handouts, and activities for each class session; evaluation forms; and other information about distance learning formats and program requirements. Trainees may obtain assistance with course requirements by contacting the instructor during the post-class audio call-in segment, by telephoning the instructor or graduate course assistant during daily office hours, or by calling the assigned grader (other graduate assistants, with one per 20 - 25 trainees) at home in the evening. Every class session is planned and scripted in advance to insure smooth, effective delivery, and more complex activities may be rehearsed in the studio just prior to air time. Broadcasts are organized to reflect the highest quality distance education strategies, including planned and continual interaction between instructor and trainees, immediate and informative feedback on performance via grading of assignments and exams, organization and coordination of all program components, and modification of content and delivery methods in response to systematic trainee evaluation.

**Program Cohort.** To reduce the isolation of distance learning and to develop a support network for early interventionists across the state, the program includes a variety of components to facilitate
participant interaction. During the first class session of each course, all students call in to introduce themselves, describe their early intervention roles and programs, and note their status in the training program (first course, last course, half way through program). These introductions allow trainees to see the range of people and practices involved in early intervention in West Virginia, to identify others with similar jobs and needs, and to appreciate the scope and impact of the training program (trainees typically encourage beginners and applaud those who finish). During all class sessions, distant site students are involved in cooperative activities (e.g., offering teaching suggestions for a case study) and collaborative activities (e.g., role playing an interdisciplinary meeting) that require them to exchange ideas with other trainees at their own site as well as with all participants on the air. Trainees are permitted (indeed encouraged) to work cooperatively within or across sites in completing two take-home essay exams as long as every trainee writes his or her own individual answers. At the final class session, a photograph of each distant site trainee is shown and some interesting personal information is shared (e.g., one woman shows horses; a man is a local disk jockey; several people have lived in a foreign country); all trainees who have completed the program are identified and congratulated. These techniques help instructor and trainees to relate to each other as real people, to build a sense of comraderie and solidarity within the distant education program, and to establish the foundations of a personal and professional support network for early interventionists that will continue even after trainees finish coursework.

Practicum Experiences. Trainees are required to complete six credit hours of practicum experiences as three two-credit-hour blocks, two three-credit-hour blocks, or as one six-credit-hour block. Those who provide direct service to young children and their families in early intervention are permitted to complete practicum requirements in their job settings with the permission of the employing agency; those who work in supervisory positions or who are not employed at all are placed in appropriate early intervention programs under the supervision of qualified personnel. Trainees attend a half-day orientation session outlining practicum procedures and requirements and they purchase a practicum handbook that contains all needed information and forms. Practicum standards require trainees to demonstrate some 50 competencies in the following areas: assessment, curriculum development, program management, instructional programming, behavior management, instructional evaluation, collaboration with families and professionals, and professional responsibilities and development. Supervisors are university-based doctoral students who travel to each trainee's practicum site, making an initial orientation visit, followed by a minimum of one observation visit per credit hour, and capped off with a final exit interview. Trainee performance is documented through live observations, review of videotaped activities, survey of a portfolio containing samples of trainee products, and interviews with other agency staff. To evaluate trainees, supervisors use a rating scale with specific indicators for each competency to be judged as Strong-Adequate-Weak as well as by a written summary statement by the trainee and the supervisor.

Program Comparison

All program phases required trainees to complete the same 24 semester hours of required coursework (eight courses) and six hours of practicum; an additional six credit hours of electives were needed to complete requirements for the Master's degree. Cost estimates are based on departmental personnel and financial records and have been adjusted for inflation, salary differences, and fee increases to allow for comparison across the 15 year time span encompassed by the three program phases.

Campus-based Program Phase. The campus-based program phase (1979-1983) required full-time study on campus for one year (two semesters plus summer sessions) and completion of a traditional practicum experience in a placement in the university community with a master educator. In this phase, the program was staffed by one instructor (faculty member) at 1.0 Faculty Time Equivalent (FTE) and one graduate assistant at .50 FTE. Courses enrolled an average of 10-15 trainees per semester and practica enrolled 5-6 trainees per semester, with 12 trainees
Completing all program requirements across a two year period (average of 6 trainees per year). The low completion rate was due to low overall enrollment as well insufficient financial support to fund full-time study. The costs for this program were primarily for personnel, at approximately $40,000 per year. Delivery costs were negligible. For this campus-based program phase, the cost per course was an average of $4000 and the cost per trainee was an average of $1400. The benefits of the campus-based program were: faculty expertise for instruction and supervision; minimal faculty time and effort; availability of multidisciplinary campus resources (personnel, materials, media); and support networking provided by a full-time trainee cohort. The drawbacks of this phase were: extensive funds needed to support full-time trainee study; inaccessibility of program to nontraditional trainee (employed individuals with adult job and family responsibilities, individuals living in rural areas or at a distance from the university); and minimal impact on real school and community service programs serving people with disabilities in the state.

Field-based Program Phase. The field-based program phase (1983-1991) allowed off-campus study at six regional sites for two years (four semesters plus two summer sessions) and completion of an on-the-job practicum experience in the trainee's local community supervised by travelling university personnel. In this phase, the program was staffed by one instructor (faculty member) at 1.0 Faculty Time Equivalent (FTE) and two graduate assistants at .90 FTE each, and two or three adjunct instructors at .10 FTE each. Courses enrolled an average of 20-30 trainees per semester (4 to 6 per site) and practica enrolled 15-20 trainees per semester, with 93 trainees completing all program requirements across an eight year period (average of 11.4 trainees per year). The costs for this program were primarily for personnel, at approximately $56,000 per year. Delivery costs (including travel expenses, telephone and mail communications, and materials) were $7500 per year. For this field-based program phase, the cost per course was an average of $12,700 and the cost per trainee was an average of $3175. The benefits of the field-based program were: accessibility of training to individuals in rural areas; availability of training to nontraditional trainees; and provision of technical assistance to service programs in the field. The drawbacks of this phase were: inexperienced instructional personnel; extensive personnel time and effort; costs associated with travel for instruction and supervision; and limited access to campus multidisciplinary resources.

Distance Education Program Phase. The distance education program phase (1991 to present) allows off-campus study at innumerable local satellite downlink sites (average 30 sites per semester) for three years (six semesters plus two summer sessions) and completion of an on-the-job practicum experience in the trainee's local community supervised by travelling university personnel. In this phase, the program is staffed by one instructor (faculty member) at .33 Faculty Time Equivalent (FTE) and two graduate assistants at .90 FTE and .50 FTE, and two additional graders at .02 FTE each. Courses enrolled an average of 20-50 trainees per semester (4 to 6 per site) and practica enrolled 8-12 trainees per semester; 18 trainees will have completed the program by 1993-1994, with another 90 or more completing all program requirements across a five year period (average of 21.4 per year). The costs for this program were high, both for personnel, at approximately $60,000 per year, and for delivery (including telecourse production, travel expenses, telephone and mail communications, and materials) at $53,000 per year. For this distance education program phase, the cost per course was an average of $12,300 and the cost per trainees was an average of $3175. The benefits of the field-based program were: instructional expertise of most qualified faculty; accessibility of training to individuals in rural areas; availability of training to nontraditional trainees; access to multidisciplinary resources of the university; development for support networks for rural trainees; and provision of technical assistance to service programs in the field. The drawbacks of this phase were: high production costs for satellite courses; extensive development time and effort; costs associated with travel for instruction and supervision; and limited personal contact between instructor and trainees.

Program Comparisons. An examination of the costs and outcomes across all three program phases reveals both striking similarities and differences. Although the campus-based program
had the lowest combination of per course and per trainee costs, it also produced the fewest number of trainees completing the program. During this phase, training was only available to individuals who could leave their jobs, homes, and families to attend the university on a full-time basis. Although trainees received some financial support, this amount was not sufficient to off-set the expense of foregoing a salary, relocating a residence, and other factors associated with study on campus. Consequently, few individuals from rural areas of the state were able to take advantage of this training in this delivery model. The field-based program achieved a reasonable balance between costs and outcomes, slightly increasing personnel and delivery costs but producing substantially more trainees. This phase presented several significant drawbacks, however, with less expert instructors, more personnel time and effort, and little or no access to university resources. Although many rural educators had access to the program during this field-based phase, many others lived in areas too remote to attend courses on a regular basis. Data from the distance education program phase show a dramatic increase in costs yet a major increase in production of trainees. While the per course costs were much higher, the per student costs remained about the same. Costs are anticipated to decrease somewhat as program operation becomes more efficient in the years to come. The costs of the distance education model are more than offset by the increase in the number of trainees (with full access even in the most rural areas). And, this model maintains nearly all of the combined advantages of both other models. It is interesting to note that per student costs were nearly equal across all three program phases; apparently, the higher costs associated with technology-based delivery can be balanced out by the higher number of trainees who are able to participate.

REFERENCES


Abstract

Teachers at Garfield Elementary School in Montana are implementing inclusive educational practice. With the inclusion of students with disabilities in regular education classrooms comes the need for intensive teacher teaming. In order to assess, understand, and structure their collaborative efforts, teachers have formed a study group. The group process has included scheduling meetings, choosing pertinent topics, securing current journal articles, discussion, practice, and debriefing. The Garfield teachers' study group experience serves as a model for providing the ongoing professional development difficult to achieve in remote, rural schools.

Introduction

Inclusive educational practice is sweeping our country. Inclusion is not synonymous with REI, but is an outgrowth of the Regular Education Initiative. In 1986, Madeline Will questioned the efficiency, and efficacy of the dual special/regular education framework in which we had been working since the 1975 passage of Public Law 94-142. She suggested a unified system which would include all students with mild disabilities in regular educational programs as an alternative. Such a system could improve the education of all students by joining the efforts of special and regular personnel in provision of programs. Inclusion grew from Will's original proposal. Parents, educators, and theorists began to question limiting unification to the education of students with mild disabilities. Seeing both academic and social growth of both regular and special students in inclusive settings, they asked, "Why not include students with severe disabilities as well?" The die was cast.

Recognizing their own dual system and in response to Will's (1986) proposal to unify regular and special education, the Billings School District #2 formed an REI Committee. During the 1990/91 and 1991/92 school years, the committee met on a regular basis to study the feasibility of including students with disabilities in regular education as the rule rather than the exception. In the spring of 1992, a proposal for inclusive education was presented to the school board.

Through a self-nomination and proposal process, Garfield Elementary School was chosen as the pilot inclusion site for the district. Garfield maintains a population of over 400 students, approximately 50 of whom qualify for special education services. The majority of children come from a lower socioeconomic background and represent varied ethnicity. Beginning in the 1992/93 school year, all students were placed in regular classrooms. Special education teachers,
previously providing pull-out services began collaborating with regular educators in the regular settings. As a Professional Development School, Garfield receives additional assistance from Eastern Montana College in the form of faculty participation and as a site for preservice student field experiences.

Although a moral basis for, and positive outcomes of Inclusion have been posited (Goodlad, 1993; Stainback & Stainback, 1990), promoting positive staff attitudes, communication between and among teachers, and collegial relationships are essential to assure successful implementation of the practice. Regular teachers are sometimes threatened by the presence of another teacher in their classrooms on a full time basis, and special education teachers feel disenfranchised without their own resource rooms and students. A school faculty has to redefine roles and develop the rapport necessary for close working relationships.

**History of Garfield Study Group Development**

With total inclusion at Garfield Elementary has come the need for increased teacher interaction and cooperation. The resource or self-contained special education teachers have abandoned the security of their own classrooms and accepted the challenge of working side-by-side with regular educators in the regular class. This role release on the part of both teachers has not occurred without self-doubt, feelings of disenfranchisement, and defense of personal turf. Although accustomed to working together on a more limited basis, and used to many visitors in and out of their rooms, the teachers felt a need for guidance, affirmation of their inclusionary efforts, and increased professional interaction.

Several options were explored for teacher professional development. Garfield, being in Billings, had ready access to Eastern Montana College. Most of the staff had earned Masters degrees. Taking additional classes on campus did not seem pertinent to their needs. As a Professional Development School, Garfield was developing even closer ties with EMC. Two EMC faculty persons worked at Garfield weekly, and the school hosted a large number of sophomore practicum students, junior field experience students, and student teachers each semester. The possibility of offering undergraduate or graduate classes on site at Garfield was explored, but because of the large number of teachers with post baccalaureate degrees, this option was deemed unnecessary. What the teachers seemed to want was a less structured format and a more relaxed environment for professional dialog. A teacher study group seemed to be the answer.

During the 1992/93 school year, a group was piloted during spring semester. Teachers from Riverside Middle School, another PDS site, near Garfield, were invited to join Garfield teachers to form a study group. The group met once a month in February and March after school. In February, the study group process was described and possible topics for discussion were explored. In March, the group convened to discuss developing a sense of community among students. The scheduled April meeting never happened. There are several possible reasons for the group's demise. First, after school meetings are not optimal for teachers. Everyone seemed to be exhausted and not ready to tackle a
cognitive challenge, regardless of interest. Second, members of the group seemed to have divergent agendas, as demonstrated by the large number of topics initially posited. Third, the group may have been too large to support professional dialogue. Or perhaps the teachers did not know each other well enough and did not have the trust in each other necessary for honest discussion.

The study group idea remained viable, however, and has been resurrected during the current school year. This time, teachers at Garfield and those at Riverside convened at their own schools. Garfield folks decided on teacher collaboration as their focus; those at Riverside are studying cooperative learning. Both groups are meeting before school, when teachers are fresh. This school year, with an early meeting time and group specific topics, the study groups are alive and well!

**Garfield's Study Group Process**

The teachers and interested student teachers at Garfield Elementary School meet two Tuesdays each month from 7:30AM until 8:20AM. The group decided on collaboration as their topic focus. The group's schedule of topics follows:

<table>
<thead>
<tr>
<th>1993-94 Collaboration Study Group Monthly Topics</th>
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<tbody>
<tr>
<td><strong>SEPTEMBER</strong></td>
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<tr>
<td>14--Gen Intro and Organization</td>
</tr>
<tr>
<td>22--Topic Schedule</td>
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<tr>
<td><strong>OCTOBER</strong></td>
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<tr>
<td>12--Adult Development</td>
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<tr>
<td>26--Personal Observation</td>
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<tr>
<td><strong>NOVEMBER</strong></td>
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<tr>
<td>9--Interpersonal Relations</td>
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<tr>
<td>23--Personal Observation</td>
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<tr>
<td><strong>DECEMBER</strong></td>
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<tr>
<td>7--Situational Leadership</td>
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<tr>
<td>21--Personal Experience</td>
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<tr>
<td><strong>JANUARY</strong></td>
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<tr>
<td>11--Clinical Supervision</td>
</tr>
<tr>
<td>26--Personal Application</td>
</tr>
<tr>
<td><strong>FEBRUARY</strong></td>
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<tr>
<td>8--Models of Collaboration</td>
</tr>
<tr>
<td>22--Personal Application</td>
</tr>
<tr>
<td><strong>MARCH</strong></td>
</tr>
<tr>
<td>8--Modes of Interaction</td>
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<td>22--Personal Application</td>
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<tr>
<td><strong>APRIL</strong></td>
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<tr>
<td>5--Change</td>
</tr>
<tr>
<td>19--Wrap-up and Projections</td>
</tr>
</tbody>
</table>

Possible subtopics were presented to the group as was a reference list of books and journal articles. The study group decided on the order of topic presentation and selected articles of interest.
EMC faculty, who work at Garfield as their PDS site, collect, xerox and distribute the articles for each month. At first, several selections were given to the teachers at each meeting to be reviewed for discussion at the next. This routine was overwhelming participants, so selections for each month are now distributed at the beginning of the month. Participants can now read articles of particular interest at their personal convenience.

The group convenes early with coffee supplied by Garfield and treats supplied by EMC. As the coffee takes effect, participants share reactions to the readings. Teachers attempt to relate what they have read to their professional roles. Conversation is alternately lively or subdued, depending on the topic, the weather, the school schedule, or any number of other extraneous variables. Topics are not covered in depth, and closure is not an issue. At the end of the first semester, Garfield teachers were asked to respond to three open ended statements:

I enjoyed...
I appreciated...
I wish...

Of the twelve teachers participating, nine responded. By and large, the teachers enjoyed the opportunity to discuss current educational topics with fellow professionals. They appreciated the involvement of EMC faculty in their group, the organization of the group by EMC folks, and the treats! Coffee and doughnuts always seem to make things better... They wished for fewer articles, with in depth discussion of each, and freer conversation about the problems they are encountering with inclusion.

The two EMC faculty members who participate in the study group initially had a more aggressive purpose. Being university types, accustomed to teaching graduate classes, they had hoped for a read→respond→implement→reflect sequence through which they could demonstrate a difference in teacher practice as a result of study group participation. At this point, the faculty agenda has not been realized, but that does not seem to matter. What is significant, is that twelve teachers have consistently participated in the study group, others have expressed an interest, and teachers are wishing for more depth in the discussion of the topics.

Application to Rural Schools

Montana is the nation's fourth largest state, but ranks close to last in population and averages only five persons per square mile. Seven Native American Indian reservations contribute approximately six percent of the state's population total. Montanans live on ranches, in one of the six population centers (of which the largest has only 80,000 inhabitants), or in one of the 500 other small communities in the state. The state's many small communities are not only "rural", but also are isolated by distance, weather conditions, geographic barriers, and poor access. The problems associated with remoteness are even greater than those of simple rurality. While land and open spaces have long characterized Montana as "Big Sky Country," it is this same vastness and openness that presents Montana with many of her most complex educational
problems. Not the least of these is recruiting teachers to sparsely populated, remote areas, and retaining them in a rural school when they begin to experience professional isolation and stagnation.

Garfield Elementary, serving a multiethnic student clientele in a low socioeconomic area, is a microcosm of Montana as a whole. Involving students of diverse backgrounds, and abilities in regular education classrooms brought teachers together in collaborative teams to meet individual student needs. Just as Garfield teachers formed a professional study group to improve their own collaborative practice, rural teachers can come together for professional dialogue. The issue of providing professional development in remote, rural areas poses sometimes formidable obstacles. Forming a group to investigate issues of professional interest can alleviate the frustration and stagnation often experienced by teachers in rural schools.

Patience is essential in allowing the study group to evolve. After two semesters (spring and fall), with the luxury of college faculty guidance and the input of educational specialists, the Garfield group is ready for in-depth discussions. It took one semester for the study group idea itself to be realized, and another to build group rapport. Perhaps after another semester, teachers will want to apply group topics to their daily practice, and will be willing to debrief their experiences. In another year, teachers may be encouraged to write their experiences in the form of case studies. The process may take even longer to evolve in small rural schools where teachers lack daily encounters with specialized personnel and consistent guidance from college faculty.

Limitations notwithstanding, if a school has two teachers with common interests and the willingness to commit time, a study group can be formed. The teachers investigate areas of common interest and potential growth. A literature review can be conducted long distance through computer access and articles secured through interlibrary loan. The group meets on a regularly scheduled basis, discusses the article(s) secured, implements suggested practice, and debriefs experiences. However, even if teachers never implement the practices which they investigate and discuss, the professional dialogue itself reenergizes. This process can provide an avenue of continued professional growth and renewal in the rural "outback".

References


Potpourri of Resources
To Tap Gifted Education
In Rural Areas

Introduction

Providing appropriate programming for gifted students in rural areas, such as West Virginia, brings unique challenges to administrators and teachers. Schools need to explore alternative means of program delivery, curriculum development, teacher development, and support services. Small schools and their surrounding communities have special strengths that teachers can utilize. New technologies can also provide workable solutions. Cooperative or regional programs with a variety of other agencies can be used to deliver appropriate services.

During the early days of gifted education, professional conferences and journals focused on practical sharing of classroom ideas, but have since shifted to being more of a source of reporting results of research studies. Teachers and administrators still need a source for idea networking. Those in the field of education could profit from conferences and journals sharing this task, as well as looking for additional means of idea sharing such as electronic mail messages and computer discussion groups. Teachers and administrators in rural areas need to have a network for sharing workable ideas to provide appropriate services to gifted students where resources are sparse.

Problems of Rural Gifted: The Theoretical Foundation

While rural communities have many strengths, these rural schools are also faced with numerous problems in providing qualitatively different services for gifted students: small numbers of identified students; more limited resources; scarcity of funding; distance from universities, libraries, and other cultural activities; difficult in obtaining trained personnel; and different cultural values.

Fewer students make it more difficult to provide specific programming for the gifted in the local school in a cost-effective manner. Smaller school populations also make it less likely that advanced courses (advanced placement, college preparatory) will be offered at the secondary level on a regular basis. Smaller populations also limit the funding sources available to the schools.

Gifted students need the interaction of other students with similar interests and abilities. They need the opportunity to develop skills in leadership and group dynamics, as well as the opportunity to discuss their feelings, with other gifted students. However, a frequent problem in rural areas is the lone student in a school, serviced on an individual basis by a special teacher.

Small rural districts are usually located a great distance from sources of support for both the teachers and students. Teachers who need to take training courses to get necessary certification have to travel great distances to get coursework. These teachers usually have less access to ongoing professional development. Additionally, universities can provide resources for students through use of libraries and contact with faculty members. Universities and larger urban areas also provide cultural events, as well as offering specialized instruction in the performing arts.
Cultural values and experiences in rural areas can also make it less likely for students to be identified and for gifted programming to be considered important within the school system. Rural communities, having been more isolated, tend to be less accepting of diversity of beliefs and behaviors and also show less acceptance of the importance of education (Pendarvis, Howley, and Howley, 1990). Because there are few job opportunities for more educated individuals, young people who have attained higher educational training usually need to move out of the community to obtain appropriate jobs.

**Varying the Variables**

In looking for solutions to the problem of providing appropriate services to gifted students in rural areas, there are several areas that need to be considered: 1) identification of students; 2) administration and delivery of program; 3) curriculum development; 4) special social and emotional needs; and 5) teacher support.

Rural areas are less likely to successfully identify gifted students using standardized intelligence and achievement tests (Spicker, 1992). Nontraditional methods of identification need to be explored.

Larger schools in urban areas can make use of the school-based resource room because there will be a large enough student population to have sufficient students to provide an appropriate program. Urban high schools have large enough populations to provide the wide range of specialized college preparatory courses and advanced placement courses to challenge these gifted students. Small rural schools usually do not have enough students to provide these same services, so these schools must explore a variety of other alternative methods of providing the necessary services for their gifted students.

Because of the different cultural values, experiences, and backgrounds, the needs of the rural gifted students are frequently quite different than those of urban students. Because educational achievements are less valued, more counseling needs to be provided to encourage students to plan for a college education. Since cultural experiences are more limited, the program for the gifted needs to plan on exposing students to a variety of cultural activities and events.

Isolated communities are frequently less tolerant of diversity, so creativity, risk-taking, and the taking of varied points of view might need to be emphasized more within the curriculum.

**Sources of Solutions**

The rural community can be a source of talented individuals that can be utilized in supporting the program for the gifted. In any given rural community there is a wealth of talent and interests to tap, as well as their creativity in exploring solutions to their local problems. A database can be developed cataloging the unique talents and interests available in the local community. Students can become involved in local issues in their community. Increased involvement in the community can also contribute to better public relations for programming for the gifted.

The school system can make use of existing educational resources within the district; resources that are not currently viewed as being part of the "gifted" program. School personnel can be surveyed as to how their skills can serve the needs of different students. Existing bus transportation routes can be utilized to transport gifted students to centers so that appropriate groupings can be accomplished. Strengths and interests of groups of students can be matched with appropriate extra-curricular activities or competitions.
The use of technology can be an exciting source of new solutions to this 'old' problem. Telecommunications, interactive television, distance learning, computers for both delivering instruction and for student production of materials are all new means of delivering instruction to both teachers and students. This technology can become a means of overcoming the obstacles of distance from informational resources, from cultural activities, and from interaction with other students.

**Potpourri of Possibilities**

1. **Programming Options**

   Small schools need to explore additional options other than the school-based resource room because there are usually not enough students within one school. School districts can explore the option of having centers within their one district, or even looking at regional centers and combining the sparse populations across two or more school districts. This allows students to benefit from the interaction with other students who have similar interests and abilities. One creative solution to this problem is to house the center for the program for the gifted at the regional vocational training center where existing bus transportation is already established.

   One-day seminars on topics of special interest can serve as a means of bringing together students on a district or regional basis. Students can prepare for these experiences independently through reading lists. Individual teachers can take turns in coordinating each of these seminars.

   Small rural schools can explore means of providing opportunities for acceleration and independent study in order to provide appropriate challenges to gifted students. Teachers throughout the school district, who are supportive of these options and who also have the necessary expertise in a subject area, can be identified and utilized as needed.

   Students with specialized interests and needs can be matched with a mentor, an individual with talents and skills that can be passed on to the student. Mentors can direct independent study projects or research projects based on their own careers or interests. Mentors can serve as role models, passing on educational aspirations, as well as specific information about their career and the necessary educational training for that particular career.

   **Residential programs** for the gifted are an additional option that has been utilized in several states, particularly in North Carolina. These programs allow students the advantages of stronger educational programming and greater resources than might be available in their small local school. Many of these residential programs focus on the very specialized talents of these students. Some of these residential programs are designed for the regular school year, while others, such as The Johns Hopkins CTY program and many states Governor's Schools, such as in West Virginia, are summer programs.

   Regional or national competitions help to establish higher expectations for these students, as well as offering the opportunity to meet other students with similar interests and abilities. Competitions in focused areas will encourage them to develop more advanced skills and to develop risk-taking, higher-level thinking skills, and leadership and group dynamics. Teachers with the necessary background and expertise from throughout the school district can become the coaches for these competitions.

2. **Local Community Options**

   Small schools will frequently be the focus of the rural community by serving as the local community center. People within small communities usually all know each other and considerable
Networking is already being done. Rural communities are also more stable than urban neighborhoods. Teachers of the gifted need to capitalize on these strengths of the local community.

Schools, or teachers within the schools, need to survey the community and create a database of the community resources; creating a list of individuals careers, interests, and hobbies that might be utilized to support school activities. Questionnaires can be sent home to families in the school; teachers throughout the school district can be surveyed as to who they have utilized in the past; students can be challenged to search for people with special interests that they might know. This community resource database can be utilized for speakers for groups, for identifying possible mentors, or for contacting for specialized information.

The use of oral history projects can actively involve students in their local community, helping them to identify the strengths of their area and helping them to take pride in their background. Many important skills can be developed through these oral history projects including research skills used in preparing for the interview, questioning skills used in developing the interview, communication skills in carrying out the interview and writing up the results, and technology skills used in preparing a final product.

The involvement in community problem-solving projects are another means of actively involving students in authentic problem-solving. Students are challenged to identify a real problem in their local area, to brainstorm possible solutions to this problem, and then to plan and carry out a plan of action to implement the selected solution. This type of project can involve students in working with many different individuals and groups in their community.

3. Technology Options

New technology is helping break down barriers such as the isolation of rural schools. Videotapes, telecommunications, videodiscs, interactive television, and distance learning bring all schools, despite their geographic location, into the mainstream of information sources.

Videotapes allow students to hear from experts in the field or to view a cultural event such as an opera or ballet not available locally. Students can easily create videotapes which they can exchange with other classes in order to interact with other students who have similar interests and abilities.

Videodiscs allow students to take field trips without leaving their local school. They can access the treasures of the Museum of Art or the Smithsonian. They can utilize these videodiscs to retrieve information and then also make use of them in creating presentations of their own.

Telecommunications allow students to communicate with other students anywhere in the world. It can be used to develop a more global perspective on world issues through exchange of electronic mail messages among students from around the world on on-line discussion groups such as KidCafe. Telecommunications can link students with mentors anywhere in the world that share a similar interest. Telecommunications provide students with a source of informational resources such as the electronic books at the Library of Congress.

Interactive television and distance learning allow small schools to provide specialized, upper level classes where there is not a large enough student population to warrant a teacher. Foreign languages, upper level science, and advanced placement classes are frequently delivered through these means.
4. Teacher Development Options

Small school districts need to explore additional options for providing all of the necessary services to their gifted students. Teachers of the gifted might need to take on the role of being the facilitators of locating all the other professionals needed to meet the specific needs of their students. The student with exceptional abilities might need the services of the math teacher in providing appropriate acceleration or enrichment.

In order to overcome the feelings of isolation, teachers of the gifted need to develop a professional network to provide support to their program. This can begin from within their local school with teachers that are supportive of what they are doing. However, this also needs to come from other teachers of the gifted. Teachers need to make contacts with other teachers of the gifted through professional organizations in their state or regional area. Teachers need to be provided with the opportunity to attend state and national conferences in order to develop this professional networking. State and national organizations need to be challenged to support more teacher-to-teacher networking. Teachers also need to take advantage of telecommunications for this professional networking. Electronic mail messages and on-line discussion groups can promote exchange of ideas and provide professional support. General on-line discussion groups such as KidSphere can provide ideas for general classroom activities, while special discussion groups such as TAG-L can focus on the special needs of gifted students and programs.

School districts, as well as teacher training institutions, need to investigate alternative means of providing on-going training to teachers of the gifted. Regional workshops, summer institutes, distance learning, correspondence courses can all be utilized to provide professional development opportunities for teachers.

Conclusions and Summary

Small schools, in isolated areas, lack many of the educational and financial resources of larger schools in urban areas. Teachers face the isolation of being the only teacher of the gifted in their district. Students also face this same isolation with small number of students identified in the schools. Teachers and administrators need to creatively explore the workable solutions in order to provide appropriate services to the rural gifted. Teachers need to make more use of professional conferences and journals to share workable solutions, as well as looking for new means of networking such as through e-mail and on-line discussion groups.

Teachers and administrators need to make use of the strengths of the rural community, the educational system, and the wide range of new technologies in looking for workable solutions. Schools need to consider non-traditional and creative options of programming and teacher development. Workable solutions are available, but school districts and individual teachers of the gifted need encouragement and professional networking to locate the solutions that is best for their local community.

References


RURAL PARTNERSHIPS: COLLABORATION THROUGH A TRANSITION TASK FORCE

Partnerships take place in many forms. Over the past several years, there have been collaborative efforts such as Partners in Education and Adopt-a-Program. While these types of partnerships are related to education in general, there are specific alliances being formed to help improve the quality of programs in special education. Some of these partnerships have come in the form of an interagency coordinating council, an advisory committee, or a transition task force. While each of these partnerships has unique purposes, they share some fundamental procedures such as development procedures.

The development of a transition task force is essential in helping rural school districts provide quality transition services. Since many rural school districts receive services from a variety of agencies and the perception of community resources may be seen as limited, the development of a transition task force is necessary. This task force may choose to implement a variety of activities which will improve community and parental awareness, assist in linkages between parents, schools and agencies, and improve overall transition services for students with disabilities. The task force may help to determine service delivery areas in their district's and be able to bring those agencies together to meet district needs. This type of partnership encourages all participants to pull together to help meet the needs of local students. This paper will discuss the purpose, structure, and process of operation for a transition task force.

The first step in developing a transition task force is to determine its purpose or role. Some task forces are designed for an advisory role. Others are designed to be working committees helping to implement a district's action plan for improvement. Most frequently, transition task forces are established to not only provide ideas for improvement, but to also help implement the suggestions. Some committees are established for the main purpose of establishing interagency agreements while others broaden their focus to assisting districts with program improvement actions. There is no one right purpose; it is up to the district to decide what role the transition task force serves. In fact, a task force can incorporate multiple purposes if needed.

Once the decision has been made to establish a transition task force, a list of members should be generated. Successful transition of youth with disabilities requires the development of a partnership between school district personnel, post-secondary institutions, employers, students with disabilities, parents, and community members such as local chambers of commerce and service organizations. In fact, Wehman (1992, p. 85) stresses, "Several persons with disabilities and family members must serve on the core team." The collaboration of these various members helps to secure different perspectives. Additionally, in rural communities, there are individuals who "wear many
hats" meaning one individual may be able to provide an assortment of views. Consideration needs to be given in keeping the membership of the task force confined to geographical boundaries surrounding the community. This allows issues to keep a local frame of reference (Hughes & Williams Graham, June 1993).

The initial task force meeting is critical in establishing commitment of members. At the end of the meeting, members should feel their time was well spent and opportunity to contribute their viewpoints was provided. There are a number of strategies which will help facilitate a successful first meeting. Prior to the first meeting, an agenda should be prepared and sent informing members of the contents of the meeting as well as providing them with a reminder of the upcoming meeting (Hughes & Williams Graham, June 1993).

During this first meeting, the following items should be discussed: Membership, co-chair selections, meeting location, follow-up meeting minutes and upcoming agendas, meeting dates, identification of subcommittees, a name for the task force and letterhead stationary/mailings. In addition to the discussion of the above structural issues, the task force will also need to address the meeting process. The group will need to decide on guidelines to facilitate democratic participation. In the course of upcoming meetings, the group will need to write a philosophy statement, select goals and develop an action plan (Everson, 1990-91; Boyer-Stephens, 1992).

Many different states have established the practice of developing partnership activities to support transition services. For example, Minnesota has been developing Community Interagency Transition Committees (CITC) for a number of years (Institute on Community Integration, 1990). Minnesota has developed a resource guide to help districts get started. Additionally, CITCs have been contributing information for yearly summary reports about the progress being made by CITCs. The reports share survey information about who is invited to be on these task force committees, roles of committee members, organizational priorities and activities, and descriptions of how needs are assessed. Priorities and activities which relate specifically to transition, greatest yearly accomplishments, descriptions of how information is shared between CITCs and youth with disabilities are also shared. The yearly summaries continue to provide information on noted barriers to effective interagency planning and quality standards for the committee meetings, group process, assessing community transition needs, and action planning and implementation (Institute on Community Integration, 1990). This kind of information is advantageous for districts considering the development of a transition task force.

Overall, a transition task force is essential in assisting local school districts meet the transition needs of youth with disabilities. Collaboration involving a number of various transition partners takes considerable planning and preparation to make transition task force meetings as effective as possible. This is a valuable way to allow various members of the transition process share their feelings/ideas for program improvement and let their actions benefit the futures of many youth.
References


FETAL ALCOHOL SYNDROME (FAS),
FETAL ALCOHOL EFFECTS (FAE):
IMPLICATIONS FOR RURAL CLASSROOMS

Abstract
The purpose of this report is to review the literature to examine the effects of alcohol upon the unborn child, the child's brain, and resulting impact on the child's learning abilities and behavior. Current strategies for preventing children and adolescents from using and abusing alcohol and drugs will be addressed. The report will conclude with descriptions of currently recommended, researched classroom strategies, a case study of applied classroom strategies, and recommendations for additional research. Information shared will be of interest to classroom teachers, parents, and educational administrators as it focuses on the needs and interventions for serving this population of students.

In a recent study drawing on 27 published reports and National Institute on Drug Abuse data, Gomby and Shiono (1991) found an estimated 73% of infants are exposed to alcohol before birth. Because of the effect of alcohol on the brain of the unborn child, the resulting varying degrees of learning disabilities, developmental delays, and behavior problems have a lifelong impact on the child's abilities to learn and socialize with peers. The disruptiveness of these conditions result in a variety of implications for an entire classroom when students suffering from these disabilities are included in the class, whether it is the special education classroom or the regular classroom setting integrating students of all abilities. The full extent of effects of alcohol on children exposed in utero may never be known. (See Shaywitz, Cohen, and Shaywitz, 1980.)

The goals of this report are to review the literature to:

1) Examine the teratogenicity of alcohol and its effects on the development of the unborn child as reported in studies by Jones & Smith, 1973; Streissguth, Barr & Martin, 1984; Streissguth & LaDue, 1987; Streissguth, April, 1990; U.S. Dept. of Health, 1990; Webb, 1992; Black, 1993; and others;

3) Discuss the developmental stages of children with FAS/FAE as observed by Streissguth, LaDue, & Randels, 1988; and reported by Wicker, 1990; Webb, 1992;

4) Review comments on terminology used in describing, defining, or explaining the effects of alcohol on learning and behavior as discussed by Sokol & Clarren, 1989;

5) Find teaching and classroom management strategies for working with rural students who may have disabilities resulting from exposure to alcohol in utero for rural educational settings as suggested by Rathbun, 1990; Groves, Ed., 1990; Van Dyke & Fox, 1990; Fox & Forbing, 1991; Burgess, & Streissguth, 1991; and Stevens & Price, 1992. The birth of a child with FAS signals a high-risk child in a high-risk environment. The child is at risk for failure to thrive, neglect and abuse, developmental delay, hyperactivity, behavioral problems, and learning problems;

6) To differentiate between students whose primary (behavioral) disturbance is chemically related from those for whom it is an emotional disturbance. Strategies for screening, referral and interventions as addressed by Medina and Hogan-Gancarz (1992) are presented.

7) Finally, to search for current programs and strategies for substance abuse intervention/prevention in youth and adolescent populations in rural and urban communities as suggested by Bush & Iannotti, 1993; Kandel & Yamaguchi, 1993; Elickson, Bell, & McGuigan, 1993; Dryfoos, 1993; and Moore & Forster, 1993; and others.

Recommendations for further research in rural communities will be shared. Strategies and recommendations will focus on the limitations of resources caused by time and distance as well as lack of available financial resources faced by rural communities (Camp & Thompson, 1992; Perry & Harmon, 1992; Howley, 1992; and Hutto & Cooper, 1992), and ways to compensate for those limitations. Rural parents and families will find many classroom strategies helpful and supportive (Elrich, 1990; Dorris, 1989).
Goal No. 1

Alcohol And Its Effects On The Development Of The Unborn Child

Lemoine and colleagues in 1968 and Jones and Smith in 1973 discussed a pattern of "altered growth and morphogenesis" in a number of infants born to alcoholic mothers. Jones and Smith (1973) called the disorder "fetal alcohol syndrome" thereby coining the term which would remain the descriptor of a condition found in far too many newborn children (p. 999). In listing the abnormalities of the eleven babies in their study, Jones and Smith found the following:

Abnormalities.

- **performance:** prenatal growth deficiency (11), postnatal growth deficiency (10), and developmental delay (10);

- **Craniofacies:** microcephaly (abnormally small cranial capacity) (10), short palpebral fissures (eyelid fissures) (11), epicanthal folds (small fold of skin covering the inner corner of the eye as in many Asian peoples) (4), maxillary hypoplasia (arrested growth of the upper jaw) (7), cleft palate (2), micrognathia (very little protrusion of the jaw) (3).

- **Limbs:** joint anomalies (limitation of motion of elbow, among the bones forming the fingers and toes (interphalangeal), and the five bones between the wrist and the fingers (metacarpal-phalangeal), and/or hip joints (8), and altered palmar crease pattern (crease(s) in the palm) (8);

- **Other:** cardiac anomalies (7), anomalous external genitalia (4), Capillary haemangiomata (4), and fine-motor dysfunction (tremulousness, weak grasp, and/or poor eye/hand coordination) (9) (Jones & Smith, 1973).

The above characteristics have remained typical of infants and children who are exposed to alcohol in utero. Ulleland (cited in Heminway, 1988) found a marked resemblance in the facial features and size of a number of infants born to mothers who were heavy alcohol users. She found evidence of mental retardation as well (Heminway, 1988).

Webb (1992), in discussing embryonic development, suggests that damage to the cell membrane may be a reason for alcohol's effect on the unborn child, as much as any damage that may occur to the chromosomes. Because all of the major external and internal structures of the fetus develop in the period from conception through 8 weeks, this is a critical time for the child if alcohol or any other developmental interruption is a factor (Heminway, 1988; Van Dyke & Fox, 1990; Dominguez, Vila-Coro, Slopis, & Bohan, 1991; and Bateman, Ng, Hansen, & Heagarty, 1993).
Streissguth, Barr, and Martin (1984) hypothesized "that prenatal exposure to alcohol [could] produce long lasting deficits in the human nervous system and that the effects [were] dose-related (p. 177). Streissguth (cited in Rivard, 1979) found that children with FAS were small with "head circumferences below the third percentile". Other symptoms included mental retardation, "persisting growth deficiency of length, weight, and brain" (Streissguth, Herman, & Smith, 1978), and delayed development. Behavioral characteristics include hyperactivity, distractible with short attention spans, difficulty with learning, usually cooperative, and acquiescent with a childlike naivete (Streissguth, et al., 1978).

Streissguth et al., (1984) hypothesized that "the effects of alcohol on behavior [could] be assessed" within the first and second days of life. Streissguth, et al., (1984) rationalized that "fetal alcoholalsyndrome (FAS) [represented] the most severe end of a continuum of central nervous system (CNS) damage produced by alcohol exposure in utero" (p. 177) suggesting the existence of lesser effects of in utero exposure to alcohol. Streissguth, et al., argued that FAS infants were "born only to mothers who [were] chronic alcoholics and drinking heavily during pregnancy (p. 117). Other researchers argued regarding dosage and amount of effects at even lower rates of alcohol consumption. The debate has continued to vary throughout the 1970's and 1980's. It was "recommended that pregnant women not consume more than 2 oz. of alcohol daily (Rivard, 1979). Recent findings have shown that effects vary with individuals and that no generic recommendation can be made except that women who are pregnant should refrain from drinking at all for even moderate amounts of alcohol pose a risk to the unborn child (Koop, 1986). Moderate alcohol abuse is characterized by Jones (cited in Little, Gilstrap, & Cunningham, 1990) as "daily consumption of four to six drinks, or 2 to 3 ounces of alcohol. Outright alcoholism is defined by eight or more drinks, or 4 ounces of absolute alcohol or more, per day" (p.4).

One of the major effects of alcohol on the fetus is in the abnormal growth of the brain. Dr. Sterling Clarren tells of Christie Uelleland’s discovery of fetal alcohol syndrome in 1970 when, as a resident physician, Uelleland noticed similarities in children born to mothers who were heavy alcohol users (Heminway, 1988). The babies were small, suffered mental retardation, and had similar facial features.

Dr. William J. Schull of the Radiation Effects Research Foundation discusses brain development in the research of the effects nuclear bombs on the survivors' descendants of Hiroshima and Chernoble. Apparently, the critical time of brain development is from 8 to 16 weeks. The neurons are forming at a rate of about 250,000 per minute. Glial cells form webs of fibers and the neurons crawl along the webbing to their final destination. The brain cells do not migrate haphazardly, Dr. Schull tells us. They have an address and migrate to that address in a highly choreographed series of events. The brain cells have to be in the right position to do the right thing. When alcohol interferes with the neurons during the critical growth period, the neurons continue past their destinations resulting in a scrambling of the different components of brain cells beyond the normal surface of
the brain, smoothing out the normal convolutions of the brain configuration. The result is neurons in the wrong places, and unable to do the right thing that would normally be required of them, resulting in mental retardation of the victim (Heminway, 1988, and Streissguth, Landesman-Dwyer, Martin, & Smith, 1980).

A number of researchers continued to confirm the disturbing effects of alcohol on the fetus of alcoholic women as it related to birth defects and infant development (Clarren, 1981; Furey, 1982; Golden, Sekol, Kuhnert, & Bottoms, 1982; Holzman, 1983; Iosub, Fuches, Bingol, & Gromisch, 1981; Kavale & Karge, 1986; Nitowsky, 1982; and Streissguth, Darby, Barr, Smith, & Martin, 1982). Because it is preventable by abstaining during pregnancy, advice to pregnant mothers and urging public health agencies regarding education of physicians, hospital employees, and the general public was recommended by most (Clarren, 1981; Furey, 1982; Holzman, 1983; Kavale & Karge, 1986; and Nitowsky, 1982).

In the fall of 1985, Streissguth, Clarren, and Jones (1985) completed a follow-up evaluation of the initial 11 children diagnosed as having fetal alcohol syndrome. (See Jones & Smith, 1973.) One child had drowned at 3 and a half, another refused to be examined, yet another had been lost to followup for 10 years, another died at 5 days old. Four of the remaining eight were attending regular classes with some help. The others were in special classes for the mentally impaired. The four more seriously disabled continue to need sheltered environments. Two of the mildly impaired individuals remained with their natural families and were experiencing social/emotional and school attendance problems (Streissguth, Clarren, & Jones, 1985; Jones, 1986).

Goal No. 2

Alcohol and Substance Abuse in Rural Communities

"If alcohol were introduced now, it would be a prescription drug of the highest order. So would caffeine" (Cole, Sept. 20, 1993). The disease concept of addiction (to alcohol): "Alcoholism is a primary, progressive disease that is not curable but is treatable. It can effect anyone. The true alcoholic needs treatment to get control" (Cole, 1993, Sept. 20).

Topping the list of characteristics used to operationally define "at-risk student(s)", Helge has placed substance abuse. At the bottom of the same list is disability. Between those characteristics, Dr. Helge included other characteristics of depression/suicide/low self-esteem, child abuse, child of alcoholic or substance abuser, illiteracy, and school dropout, among others. Dr. Helge defined rural as "a district in which the number of inhabitants are fewer than 150 per square mile, or located in a county in which 50% or more of the population lives in communities of 5,000 or fewer" (Helge, 1991, p. 42). In her discussion of the results of the survey, she found 11.8% of the children with disabilities were children of an alcoholic parent. Twelve-point-two of the non-disabled were children of an
alcoholic parent. Most at-risk students displayed more than one of the at-risk characteristics. It was found that low self-esteem and/or the existence of a dysfunctional (distressed) family overlay other characteristics (Helge, 1991). These two characteristics combine to make a discouraging environment in which the at-risk child must struggle to survive. A serious consequence for these children is their own use of alcohol to ease feelings of worthlessness and loneliness (Harrigan, 1987).

In the project designed to enhance self-esteem for at-risk students, the case study reveals alcoholic parents or caregivers who use alcohol or drugs to be a factor in 4 out of 12 cases. Sexual activity, either abusive or by choice, is a factor in 5 of the 12 cases. Many of the students exhibit characteristics that could be connected to FAS or FAE. Three are apparently ruled out of FAS/FAE because they are described as "bright" (Helge, 1989, Spring). Belatedly, it might be productive to evaluate the students for alcohol or drug exposure in utero.

With the prevalence of alcohol as a socially accepted form of entertainment and/or activity, it seems reasonable to examine the possibility that many children with mild to severe mental retardation and/or learning disabilities might be victims of exposure to alcohol in utero.

Goal No. 3

The Developmental Stages of Children with FAS/FAE

Certain characteristics change in all persons as they mature. It is true, also, of the person exposed to alcohol in utero. Streissguth & LaDue (1987) list the developmental problems in FAS. They discuss behavior problems which will have an impact on the child’s school progress and socialization. Among these problems are hyperactivity, eating problems, stuttering/stammering, reduced clarity of speech, clumsiness in upper limbs and lower limbs, dependency, hearing impairment, heart problems, head and body rocking, impaired concentration, and phobias. Delays in motor development and language development will also impact the child’s school performance.

Infants.

Babies with FAS are small and scrawny in appearance. They are often irritable and tremulous, (Streissguth, et al., 1988) may display weak sucking, poor feeding, hyperexcitability, and fitful sleeping (Streissguth & Giunta, 1983). They may continue to lose weight longer than usual after birth (Streissguth, et al., 1988). Such infants are frequently subject to illnesses, failure to thrive, and evaluation of heart or other physical defects (Streissguth, et al., 1988 and Streissguth & Giunta, 1988).
When FAS babies remain in the care of the biologic mothers who continue to drink, they are at high risk of abuse and neglect (Streissguth, et al., 1988). Alcoholic mothers may simply be unable to provide care and nurturing for the FAS child. Mothers who are heavy alcohol abusers are, themselves, at risk of alcohol-related physical disorders and poor health, in general (Streissguth & Giunta, 1988).

Fetal alcohol infants, as a group, are mentally handicapped and will likely have slow motor, language, and physical development. Older infants are usually cooperative, have child-like naivety which can threaten their safety, are acquiescent and compliant. They are often clumsy, impulsive, and unrestrained. They exhibit short attention spans, fidgetiness, and inattentiveness (Hill, Hegemier, & Tennyson, 1989).

Preschool years.

FAS children remain small, short, and elf-like in manner and appearance (Streissguth, et al., 1988; Streissguth & Giunta, 1988). They are alert, friendly, with butterfly-like movements, like to be touched, and usually have a happy disposition. While hyperactive, the child may exhibit developmental delays, especially in the richness of speech, though excessive talking is typical (Streissguth, et al., 1988).

Early school years.

School may be delayed a year or kindergarten repeated due to developmental delays in speech, motor development, and hyperactivity. The most obviously mentally impaired are usually diagnosed during this period and spend much of their time in special education environments. Mathematical concepts with their abstract approaches are usually more difficult than language skills. Attention deficits become more obvious and critical as the demand for concentration increases. Poor peer relations and social isolation are not uncommon due to poor impulse control and social intrusiveness (Streissguth, et al., 1988).

In exploring behavior and learning difficulties, Shaywitz, Cohen and Shaywitz (1980) looked for subtle indications in a group of children who were having behavior and learning problems in school, but had not necessarily been identified as FAS or FAE. This group was examined for indications of prenatal exposure to alcohol. Shaywitz, et al., (1980) indicated their findings suggested carefully following the children of alcoholic mothers "through the early school years for the possibility of learning difficulties" (p. 978) and that "children experiencing school failure should be evaluated for indications of prenatal exposure to ethanol" (alcohol) (p. 979). In the group they examined, all of whom were in the normal range of intelligence (82-113 I.Q.'s), all were experiencing school failure, all but one were described as hyperactive, having a short attention span, distractibility, and an inability to function without intensive one-to-one or small group activity. Thirteen of the fifteen were referred for special education services by the first
grade; all were recommended for special education by third grade. Their findings provided support that milder degrees of central nervous system dysfunction were frequently encountered in children of alcoholic women.

**Middle school years.**

School achievement usually reaches maximum by this time, with more strength in reading and spelling, and less ability in the abstracts of arithmetic. Maintaining attention becomes increasingly difficult. The need to master new academic skills increases stress and reduces attendance. Proper evaluation and educational/vocational placement during these years increases the student’s success later on. Low adaptive skills and poor intellectual development make them high-risk for inability to live independently (Streissguth, et al., 1988).

**Adolescence.**

Certain behaviors common to FAS/FAE children seem to intensify with age. Learning disabilities cannot be fixed. Poor judgement and inability to understand fully the consequences of their actions, they seem to have limited conception of the future or the capacity to learn from experience (Staff, 1990, November). They have limited understanding of moral issues, not seeming to pay particular note of praise or blame (Staff, 1990). Its unlikely that they will be able to live independently (Black, 1993). They require much patience and need clear and consistent limits on their behavior with immediate correction and consequences when breaking the rules. Retaining information is difficult for them (Staff, 1990).

Fetal alcohol syndrome results in a predictable, long-term progression of the disorder into adulthood. Maladaptive behaviors are the greatest difficulty in the treatment (Streissguth, Aase, Clarren, Randels, LaDue, and Smith, 1991).

**Goal No. 4**

**Terminology Used In Describing The Effects of Alcohol.**

In 1989, Sokol and Clarren set about their goal of providing a set of guidelines for use by investigators, care givers, researchers, and others to establish consistency when reporting the results of scientific study.

**Fetal alcohol syndrome (FAS).**

Defined as patients with abnormalities in: (a). prenatal/postnatal growth retardation, (b). central nervous system involvement, and (c). a characteristic face (Sokol & Clarren, 1989). Abnormalities in all three categories are necessary for a complete diagnosis of FAS (Sokol & Clarren, 1989).
Alcohol related birth defect (ARBD).

ARBD is suggested because it connotes attribution of the observed anatomic result to the child to the consumption of alcohol by the mother (Sokol & Clarren, 1989).

Possible Fetal alcohol effects (FAE).

FAE means only that alcohol is being considered as one of the possible causes of a patient's birth defects. It has been misused to mean a birth defect judged milder than FAS. But this has been inconsistently documented. There has been no consensus on an acceptable way to use the term or to define it (Sokol & Clarren, 1989).

Goal No. 5

Teaching and Classroom Management Strategies for Students With FAS/FAE

Antonia Rathbun (1990) capsulizes FAS or FAE students as:

• often needing reteaching due to memory deficits;
• heavily dependent upon the daily routine or schedule due to sequencing impairment. Rearranging the classroom environment causes them anxiety because they are strongly environmentally cued (visual/kinesthetic hypersensitive);
• unable to follow verbal directions because they have audio processing deficits;
• having low motivation and high distractibility;
• having difficulty in transitioning from one classroom activity to another (state rigidity);
• having difficulty keeping up with activities that move faster than they are (tracking problems);
• tending to resist the rules due to emotional and perceptual perseveration and inability to create and maintain an internal structure or discipline;
• having oversensitivity to stimulus (distractibility), hypersensitive to criticism and difficulty finishing tasks;
• experiencing fatigue from regular stimulus level of the classroom and show exhaustion after a typical school day (psychic exhaustion);
• taking three times as long to do homework or classwork (slow cognitive pace);
• showing hypersensitivity to touch, taste, texture, or sound;
• seeming younger than their peers (developmental delays);
• exhibiting some form of sleep disturbance;
• having inability to gauge cause and effect (impaired predictive skills) but can be trained to use deductive logic;
• poor at selecting potential choices;
• easily frustrated and needing frequent encouragement;
wanting to please, believing they can't; and
not knowing why their brains don’t seem to work right and get even more confused when they try harder. They need to try differently. While early intervention helps, these children are not just learning disabled.

They are victims of lifelong disabilities caused by prenatal brain damage. Teaching functional "daily living skills" focusing on present and future living environments (Burgess & Streissguth, 1992) will assist students to become as independent as possible. Teaching communication skills and social skills are also essential.

Keeping the class size small and creating a safe, structured, stress-reduced environment is essential for them to learn (Black, 1993). Have few classroom rules and highly structured teacher-directed activities (Cole, Jones, & Sadofsky, 1990). "... Help children develop new coping strategies before removing the current ones" (Griffith, 1992, p. 34).

Specific classroom strategies.

Patricia Tanner, Ph.D. has prepared a listing of methods/strategies for educating children with ADD. These strategies are effective with children with FAS/FAE. She gives five keys to working with children with attention deficit disorders: structure, persistence, consistency, brevity, and variety.

Goal No. 6.

Differentiating Between Students Whose Primary (Behavioral) Disturbance is Chemically Related.

In 1992, Medina and Hogan-Gancarz conducted a survey using the Personal Experience Screening Questionnaire (PESQ) to differentiate between students whose behavior problems were chemically related and those whose behavior was the result of emotional problems.

The results indicated that 37% of the students enrolled in Behavior Intervention Classes (BIC) might be at-risk for chemical dependency. Some evidence of psychological distress were also reported. Results also suggested that the PESQ might be a valid instrument for evaluating the chemical use of both regular and special education students (Medina & Hogan-Gancarz, 1992).
Goal No. 7

Programs and Strategies for Substance Abuse Prevention/ Intervention.

Student populations which are vulnerable to substance abuse include the special education student. Preventative measures which can be taken to counteract such vulnerability include:

1. Education about drugs and their effects;
2. Affective skill building;
3. Development of recreational skills;
4. Appropriate modeling by adults;
5. Enhanced communication and support systems.

The Office for Substance Abuse Prevention (OSAP), U.S. Department of Health and Human Services publishes Prevention Monographs which list programs that have proven effective. OSAP Prevention Monograph-3. Prevention Research Findings, 1988 covers research perspectives, School-based prevention programs, community-based prevention programs, health promotion and wellness programs, and public policy prevention programs. OSAP Prevention Monograph-5, Communicating About Alcohol and Other Drugs: Strategies for Reaching Populations At Risk talks of various populations considered at-risk for substance abuse. These include families and youth from high-risk environments, Black inner-city youth, Hispanic-Latino youth, parents, primary care physicians, and working with intermediary organizations. Publications are available from the National Clearinghouse for Alcohol and Drug Information, P.O. Box 2345, Rockville, MD 20852, 1-800-729-6686. OSAP also publishes the Citizen's Alcohol and Other Drug Prevention Directory which lists resources for getting involved. It is available through the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. For programs that are already in place, see the Prevention Plus II Tools for Creating and Sustaining Drug-Free Communities.

A local program that works is the "The Care Network, a student and employee assistance program for prevention, intervention, and aftercare services to students and employees who are at risk for engaging in self-destructive behaviors" (Fullerton, 1991). The program provides interventions and support groups, training and workshops, which assist educators and students to understand and change destructive relationships.

Discussion

Whether FAS/FAE children thrive is impacted by the home environment in which they exist. In some cases, children were left with their natural families. In many cases, children are placed in foster homes or adopted. Adoptive parents, if the prebirth condition is unknown, can find themselves in extremely traumatic situations with children whose behaviors are, at the least, extremely trying
Native American populations seem to be especially vulnerable to the occurrence of FAS/FAE in infants (Dorris, 1989; Streissguth, et al., 1988; Kolata, 1989; Streissguth, LaDue, & Randels, November, 1987). Proper care, programming and training cannot eradicate the basic disability of children with FAS, but they can be crucial factors in the quality of life they are able to achieve (Streissguth et al., 1987, November).

Ann Streissguth (1986) warns

The birth of a child with FAS should signal a high-risk child in a high-risk environment. The child is at risk for failure to thrive, neglect and abuse, developmental delay, hyperactivity, and learning problems. The mother is at risk for alcohol-related disorders and early death if she continues to abuse alcohol. (p. 224)
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ALTERNATIVE CERTIFICATION IN SPECIAL EDUCATION: 
A QUALITATIVE STUDY OF TWO MODELS

Introduction

The urgent need to train additional special education teachers has resulted in a variety of initiatives by state agencies as well as the federal government to create additional training programs, to simplify certification requirements, and to devise alternative methods for the preparation of teaching personnel. Such alternative routes to certification have raised serious issues about the qualifications of teachers trained by short-cut methods, as well as the quality of services they are able to provide to students with disabilities. Although highly touted as the answer to the supply-demand imbalance of special education teaching personnel, alternative certification models, to date, have not produced conclusive and convincing evidence of their effectiveness. To date, there has been practically no research reported investigating the effects of alternative certification programs, or their impact on schooling or students. The existing literature has described the features of such programs, but has failed to report data on the proficiency of teachers prepared by alternative certification programs, their subsequent employment and retention probabilities, or their impact on services to students. And, no data is currently available that evaluates the effectiveness of alternative certification programs in preparing special educators. Such research is clearly needed, both by policymakers and by practitioners.

Need for The Research

The shortage of educational personnel to serve students with disabilities in the nation's schools is a problem fast approaching crisis dimensions. A serious shortfall of teachers has been predicted for all areas of education in the 1990s, but especially for special educators (Akin, 1988). The situation is generally recognized as immediately critical for special education (Smith-Davis, 1990). The number of students enrolled in special education programs has been slowly growing (McLaughlin, Smith-Davis & Burke, 1986; United States Department of Education, 1990), while the number of degrees conferred in special education has been steadily declining (Geiger, 1988). In rural areas, severe shortages of special education personnel have persisted for many years (Helge & Marrs, 1982; Lauritzen, 1988; McLaughlin, Smith-Davis & Burke, 1986; Smith-Davis, Burke & Noel, 1984). There is thus an urgent need to prepare a sufficient number to teachers to counteract these shortages, if students with disabilities are to be adequately served by the schools.

A number of states have modified, eliminated, or waived some teacher certification requirements, generally in an effort to counteract these teacher shortages. Alternative certification models are nontraditional personnel preparation programs designed to reduce the time and expense of obtaining credentialing as a teacher through a streamlined curriculum coupled with intensive on-the-job supervision (Baird, 1990; Oliver & McKibbin, 1985). They allow individuals with college degrees in other fields to enter teaching without enrolling in a traditional campus-based teacher education program (Graham, 1988). Alternative certification is distinguishable from emergency certification, through which schools are authorized under certain circumstances to hire personnel without proper certification, who then must complete all existing certification requirements within a specified time period (Darling-Hammond, Hudson & Kirby, 1989; Smith-Davis & George, 1989). The implementation of alternative certification programs has generated considerable controversy over the legitimate nature and form of teacher education (Casc, Lanier & Maskel, 1986; Corrigan & Haberman, 1990). Yet, the impact of such alternative certification models in reducing teacher shortages has not been determined.
While it is certain that a variety of alternative certification models exist, because they have been described at professional meetings and in the literature, the number, location, and features of existing models is at present unclear. Different authors have reported conflicting information (Adelman, et al., 1986; American Association of Colleges of Teacher Education, 1990; Baird, 1989; Council of Chief State School Officers, 1988; Darling-Hammond, 1988; Feistritzer, 1990; Graham, 1989), while several surveys have produced inconclusive results because respondents confused alternative with emergency certification (CSPD Caucus, 1988; Office of Planning and Evaluation Services, 1988; Ludlow & Bloom, 1989). And, the number of alternative certification models that actually involve special education is even more uncertain (Smith-Davis, 1989). Ludlow and Bloom (1989) reported that only nine states had approved or were considering the adoption of an alternative certification model in special education. Accurate information about the nature and form of these models is needed to determine their applicability to other states.

To date, there has been practically no research reported investigating the effects of alternative certification models, or their impact on schooling or students. The existing literature has described the features of such models (Darling-Hammond, Hudson & Kirby, 1989; McKibbin, 1988; Shotel, 1989), but has failed to report data on the proficiency of teachers prepared by alternative certification programs, their subsequent employment and retention probabilities, or their impact on services to students. And, no data is currently available that evaluates the effectiveness of alternative certification models in preparing special educators (Hawley, 1990; Ross & Pipho, 1990; Smith-Davis, 1989). Such research is clearly needed, both by policymakers and by practitioners.

The controversy surrounding alternative certification in special education demands an immediate and serious research effort. Research is needed to determine the appropriateness of alternative certification training models in preparing special educators to deliver quality educational programming to students with disabilities (Geiger & Smith-Davis, 1989; Hawley, 1990), as well as their effectiveness in addressing the critical teacher shortages by increasing the pool of available teachers and reducing the turnover and retention problems (Smith-Davis, 1989). Proponents of alternative certification have asserted that such models encourage talented people from other fields to enter teaching (Cornett, 1988; Rowe, 1985) and increase the potential supply of teachers available to reduce shortages (Ross & Pipho, 1990; Roth & Lutz, 1986), and that traditional teacher education programs have little substance or value in preparing teachers (Sikula & Roth, 1984) while alternative models provide intensive training and supervision focused on critical skills needed for successful teaching (Baird, 1990; Dill, 1990). Opponents, on the other hand, have argued that alternative certification models fail to insure adequate standards of professional training (American Association of Colleges of Teacher Education, 1985), contradict current trends to professionalize teacher preparation to achieve educational excellence (Darling-Hammond, 1984), and attract prospective teachers who are less qualified than many teacher trainees (Olsen, 1985). Research must be designed to investigate whether alternative certification models achieve desired effects without sacrificing quality.

A study of alternative certification models has many implications for practice in teacher education in special education. Recent calls for reform in teacher education have stressed the need for longer, more rigorous programs of study (Carnegie Task Force, 1986; Holmes Group, 1986). As a result, the National Council for the Accreditation of Teacher Education (NCATE) and the Council for Exceptional Children (CEC) adopted Standards and Guidelines for Curriculum Excellence in Personnel Preparation in Special Education to serve as minimum standards for the field (Council for Exceptional Children, 1987). Some authors have even argued for national standards of teacher certification in special education to insure quality educational programs for students with disabilities that are equivalent across the country (Gabrya 1989; Heller, 1983; Reynolds, 1990; Strosnider & Little, 1988). Alternative certification models in special education run counter to these trends; thus, they have many implications for the development of new teacher training programs, as well as the modification of existing ones. The study of alternative certification models also has significant implications for educational policy at the state and federal levels. Both state and federal agencies, therefore, could make use of research findings existing on alternative certification models to drive future policy statements (Roth & Lutz, 1986). State educational agencies are faced with the challenge of obtaining certified teachers who are
appropriately trained and qualified to teach in a time- and cost-efficient manner. The federal government needs information to insure a wise investment of its resources in providing financial incentives to programs designed to address teacher shortages in special education, without impairing the quality of services to students with disabilities. The results of research on alternative certification in special education, therefore, would be useful to state and federal decision makers for the development, implementation, and evaluation of teacher education policies.

Research Design
This research project used a three-phase design based upon Babbie's (1975) elaboration model of survey analysis, to collect, analyze, and interpret data on alternative certification models in special education. In the initial Descriptive Phase, the investigators searched the literature, surveyed authorities in the field, and interviewed personnel at existing training projects, and used these data to describe the current status of alternative certification. During the subsequent Analysis Phase, the investigators selected two existing models for site visits, document reviews, and participant interviews in order to evaluate the effects of existing projects, compare existing projects with one another and with traditional teacher education program standards, and analyze local, state, and federal policies to determine the implications of alternative certification for policy and practice in special education. The third phase of the study incorporated qualitative ethnographic research techniques of document review and analysis, observation with field notes, and participant interviews to collect and interpret data about specific alternative program features: recruitment/eligibility of trainees, orientation, instruction, supervision, collaboration between school systems and colleges/universities, and program completion/trainee retention.

Findings from Program Comparison Phase of Research
After identifying alternative certification programs special education all across the country, the researchers selected two programs for further study; these programs had the longest history of operation, the broadest scope of areas of specialization, and the largest numbers of trainees (including a representation from minority groups), yet distinctive features, with one operated by a local school system and representing a large urban district (Houston Independent School District in Texas) and the other operated by a university and representing a combination of urban, suburban, and rural school districts. The co-principal investigators contacted the administrator of each program and arranged for an on-site visit lasting several days, and involving review of program documents and operation as well as interview of key personnel, including staff, prior and current trainees, mentors and supervisors, and employers. All interviews were audi-taped and transcribed; field notes taken by the researchers during on-site visits also were transcribed. Written summaries of program documents such as program accreditation materials, course syllabi, practicum handbooks, and evaluation data (and copies of select information where permissible) were made and transcribed.

Houston Independent School District Program
The Houston program is operated by the Houston Independent School District in collaboration with the University of Houston. The district employs a full-time program administrator, several trainee supervisors called Professional Development Specialists, and selects a peer mentor (paid by stipend) for each trainee. A faculty member at the university serves on district committees to select trainees and make policy changes. The district advertises for trainees each spring, interviewing numerous applicants, and selecting 30 or more new trainees per year (depending upon available teaching positions). Prospective trainees are required to attend an orientation session lasting every evening for two weeks during April and May as well as to observe in classrooms for five full school days. Orientation sessions introduce trainees to basic concepts in special education, such as lesson planning, classroom organization and management, and multicultural strategies, as well as to school policies, such as discipline policies, special services, and media resources. University faculty offer six basic courses (across all specialization areas) and three to four advanced courses for each specialization area. Courses are restricted to trainees but scheduled on campus during summer sessions and in the evenings during regular semesters. Mentors (usually another special
educator in the same school building) provide advice and guidance, making observations visits at periodic intervals across the year. Professional development specialists each supervise a number of trainees in a given specialization area, also making observation visits at intervals throughout the school year. Trainees must pass all coursework, obtain a satisfactory rating by supervisors on the Texas Teacher Performance Appraisal System (TTPAS), as well as attain a passing score on the Exceptional Education Competency Evaluation Test (EXCET) in order to be fully certified. Trainees receive a professional salary (less $2,500 per year to cover costs of participation in the program) and earn a full year or more of service toward tenure, taking one year to complete all requirements. Trainees may take additional coursework at the university to obtain a Master’s degree, but few trainees avail themselves of this option because Texas does not provide a salary increment for advanced degrees. This program has the approval of the Texas Education Agency as an alternative certification program; the course requirements are identical to those offered through traditional programs at the University of Houston, which have been accredited by the National Council on the Accreditation of Teacher Education (NCATE).

The Houston program’s content is based on a curriculum matrix that identifies knowledge/skills/values in six areas: assessment; instructional modifications (for learning); instructional strategies (for behavior); educational policies; theories of learning and development; and program management. Instruction is delivered by university faculty through six required courses for all trainees (regardless of area):

- Introduction to Exceptional Children
- Introduction to Reading
- Assessment
- Diagnostic Teaching
- Remedial Reading
- Behavior Management

Trainees may take additional courses in their areas of specialization.

The Houston program internship (supervision of practice) is conducted throughout the year-long program, with observation and feedback provided by both mentors and supervisors (all school district personnel) according to a structured format determined by the Texas Teacher Performance Appraisal System (TPAS). Teaching competencies are assessed in five domains: instructional strategies; classroom management and organization; presentation of subject matter; learning environments; and professional growth and responsibilities. These competencies were specified by the Texas Department of Education for all teachers, and do not reflect skills specific to special education.

Participants in the Houston program were enthusiastic in their support for this alternative certification program. Most of the comments made by elementary and secondary teachers cited the importance of coursework with an applied (rather than theoretical) focus, the helpfulness of the mentors and supervisors (and to some extent instructors) in solving pupil learning and behavior problems in the classroom, and, most important, the personal support provided by the cohort group of other trainees. Elementary and secondary principals focused on how the recruitment and eligibility process enabled them to select trainees with personal qualities for effective teaching, and how the intensive contact with supervisory personnel enabled these teachers to "survive" an arduous first year of teaching. Project staff (both school and university personnel) stressed the importance of effective collaboration between the school and university to insure a program of high quality and efficient operation.

San Jose State University Program

The San Jose program is operated by the Special Education Program at San Jose State University in cooperation with a variety of local (urban, suburban, and rural) school systems. The university appoints a faculty member to serve as a part-time program administrator, employs a number of university field supervisors, and pays a stipend to a peer mentor selected by the school district for each trainee if the school chooses to provide one. A committee composed of faculty members, administrators from the various school districts, and former trainees meets several times per year to review the program and recommend policy changes. Trainees may be recruited by
school systems or by the university, but each trainee is responsible for securing an appropriate teaching position prior to enrollment in the program. Prospective trainees attend an orientation session on a Saturday early in the Fall semester. The orientation session introduces trainees to basic concepts in special education, such as assessment, lesson planning, behavior management, time management, and bilingual education. University faculty offer four courses restricted to trainees and scheduled on release days once per month during regular semesters; four other courses are offered in the evenings and during summer sessions. School administrators are responsible for providing substitute teachers for trainees on release days. Mentors (usually another special educator in the same school building) provide advice and guidance, making observation visits at intervals across the year. University supervisors each supervise several trainees, making observation visits at intervals during the first and last semesters of participation in the program. Trainees must pass all coursework, obtain a satisfactory rating by supervisors in the culminating Directed Teaching experience, as well as attain a passing score on the California state teaching competency test in order to be fully certified. Trainees receive a professional salary and earn a full year or more of service toward tenure, taking two years to complete all requirements. Trainees may take additional coursework at the university to obtain a Master's degree, and many trainees avail themselves of this option to achieve a salary increment for advanced degrees. This program has the full approval of the California Credentialing Commission Certification Board as an alternative certification program; the course requirements are identical to those offered through traditional programs at San Jose State University, which have been accredited by the National Council on the Accreditation of Teacher Education (NCATE).

The San Jose program's content is based on a curriculum matrix that identifies knowledge/skills/values in four areas: assessment; instruction; pupil and program evaluation; and professional interpersonal relationships. Additional competencies are reflected in specific courses. Instruction delivered by university faculty through one prerequisite and eight required courses for all trainees (regardless of area):

- Introduction to Exceptional Individuals (prerequisite - in basic education credential)
- Behavior and Classroom Management
- Language Arts Programs
- Individual and Classroom Program Development
- Speech/Language Development
- Counseling and Consultation Skills
- Advanced Assessment
- Career and Vocational Development
- Math, Science, and Social Studies Methods

Trainees may take additional courses in their areas of specialization.

The San Jose program internship (supervision of practice) is conducted primarily during the initial semester (induction phase) and the final semester (evaluation phase) of the two-year-long program, with observation and feedback provided primarily by supervisors (all university personnel) according to a structured format determined by the university's special education program. Mentors provide guidance through a less-structured format. Teaching competencies are assessed in four domains: assessment/program development; instruction (including classroom organization and management); pupil and program evaluation; and professional interpersonal relationships. These competencies were selected by the university's special education program faculty to reflect skills specific to the role of special educator in the schools.

Participants in the San Jose program were enthusiastic in their support for this alternative certification program. Most of the comments made by elementary and secondary teachers cited the importance of coursework with an applied (rather than theoretical) focus, the helpfulness of supervisors (and to some extent instructors) in solving pupil learning and behavior problems in the classroom, and, most important, the personal support provided by the cohort group of other trainees. They especially liked release day classes, which freed them from classroom responsibilities one day per month to concentrate on studies. Elementary and secondary principals focused on how the recruitment and eligibility process enabled them to select trainees with personal qualities for effective teaching, and how the intensive contact with supervisory personnel enabled
these teachers to "survive" an arduous first year of teaching. Project staff (all university personnel) stressed the imprtance of effective collaboration between the school and university to insure a program of high quality and efficient operation.

Program Comparisons
A comparison of the Houston and San Jose programs reveals more similarities than differences. Both programs rely on collaborative agreements, both employ similar systems of supervision (combining mentor teachers and supervisors), and both use a state-mandated exit exam for program completion. The most striking differences, perhaps, reflect the difference in sponsoring agency: San Jose is university-based, with assistance from school systems; Houston is school-based, with assistance from the university. One difference is in the nature of the recruitment and eligibility process, an elaborate affair involving review of applications and committee interview of candidates in Houston, as compared with each school's individual hiring procedures in San Jose; this represents the Houston school district's commitment to hiring the best possible personnel, a process that is not under the direct control of San Jose's program staff. A second difference is the extensive orientation/observation session in Houston, where the school system can require attendance by prospective employees, as opposed to the single-day session in San Jose, a university which has less authority to compel participation. Another important difference is the delivery of instruction, with San Jose implementing four release day courses, while Houston offers all courses in the evenings or summer sessions. The Houston program takes one year to complete because trainees start in the preceding summer and take only six basic courses; the San Jose program, on the other hand, takes two years to complete eight courses and two practicum experiences. While many of the courses are similar, the overall program philosophy reflects theoretical differences; the Houston program reflects an applied behavioral analysis orientation, while the San Jose represents a more eclectic approach.

All participants in both programs were agreed that alternative certification programs are a viable option for the preparation of special education personnel. Project staff in both programs asserted the superiority of the orientation-instruction-mentoring-supervision-trainee cohort core structure of each program over the typical inservice training offered to practicing special educators working on emergency or provisional teaching permits. Both staff and trainees across programs felt that the series of activities common to each cohort group of trainees provided a critical support system for new teachers as well as promoted more effective learning through discussion and sharing of experiences. Few participants identified any weaknesses or significant needs for improvement in either program; some individuals expressed "pet peeves" with each program, such as inflexible scheduling of courses that conflicted with other responsibilities, or the lack of formal training for mentors. The overwhelming response of all participants was to recommend alternative certification options as effective methods for addressing teacher shortages and attracting qualified individuals into the teaching profession.

REFERENCES


PORTFOLIO ASSESSMENT IN TEACHER EVALUATION: A COMPARISON OF THE PERSPECTIVES OF GENERAL AND SPECIAL EDUCATION ADMINISTRATORS AND TEACHERS

Portfolio assessment is one of the latest entries into the movement toward "authentic" assessment designed to close the perceived theory-practice gap in education. Historically used with elementary and secondary students in specific content areas, such as reading or writing, its use is currently broadening in its applications to other content areas and expanding into other age groups. Teacher education programs have recently employed various strategies to go beyond preparing teachers for the appropriate classroom use of portfolio assessment to providing a model for using a portfolio for the evaluation of individual teacher's professional development. The purpose of this paper is to report the results of an exploratory study of the attitudes held by general and special education administrators and teachers toward the use of portfolio assessment for teacher evaluation.

The portfolio, a newly favored technique, is a collection of individual work that documents the learner's efforts, progress and achievement (Arter & Spandel, 1992). The portfolio can take on many forms, some of which are reviewed for efficacy herein.

Portfolio assessment used with teachers encourages choice, revision, and reflection related to their own work. It gives them a basis for displaying their best efforts and forms the foundation for professional development. In addition to its potential effectiveness for teachers, the portfolio is often advocated because it may provide public school administrators an organized product which documents a teacher's abilities and professional excellence. According to Cole and Uphoff (1992), this provides evidence of how the job candidate operates as a thinking, problem-solving, self-evaluating professional. Bird (1990) asserts that portfolio documentation will provide important information in hiring decisions such as teacher plans, examples of developed materials, tests and the like. In fact, several states require that portfolios be used as part of the teacher evaluation process (e.g., Futtwengler, 1985; Terry & Eade, 1983). Stemmer, Brown and Smith (1992) note that employers are now demanding evidence that those people they employ can get the job done. These authors raise the concern that students might put materials together that may not be employer relevant. This issue became one of several addressed from the teachers' perspective in this research.

Portfolio assessment is used when assessment must be dynamic. When change and development is needed to assess the potential of future employees, the richest portrayal of performance in action is based on the data in a portfolio. The portfolio in this dynamic sense is based on many different sources of information, collected over time, in authentic settings. The portfolio reflects the important activities that take place in classrooms. It is
believed that the best person to determine what is important is the teacher. The portfolio framework provides teachers with a purpose and a structure for keeping and sharing their work. It may lead to mentoring, collegial interactions, and reflections on the teaching process as well (Wolf, 1991).

Authors argue about the components that belong in the teacher portfolio. Some specify general categories (Barton & Collins, 1993), others advocate for the inclusion of domains of interest (Geiger & Shugarman, 1988; Ryan & Kuh, 1993), and still others prefer to include evidence of various processes that take place (Urbach, 1992). Some of these components are detailed in Table 1, Possible Contents of Portfolios: Suggestions From Various Authors. An examination of this table brings up several important points. A portfolio must clearly define the teacher's area of expertise, the contexts in which excellence has been demonstrated, and the groups of students taught. Additionally, a portfolio can document experiences with student differences, such as diversity in ethnicity, language, economics or ability.

Table 2 presents a more formal approach to the generation of portfolio contents. This table was derived from Bird (1990) and contains significant detail to account for the possible components in a portfolio.

Finally, portfolios must contain tangible products. One attempt at defining these products is provided in Table 3 abstracted from Urbach (1993) and supplemented by authors of this paper. This listing is illustrative but not comprehensive or exhaustive. It reflects examples of the current thinking in the field about what constitutes the portfolio.

Given the diversity of potential products to include in a portfolio and the multiple ways in which a portfolio might be used, there appears to be a need to develop baseline data regarding the form and function of portfolio assessments according to principals and superintendents. Additionally, there may be a discrepancy between the ideas of teachers and those who hired them regarding appropriate content and use of portfolios. Other differences may exist between general and special educators and rural and urban school needs.

One of the reasons for differentiating between general and special administrators relative to their perceptions of portfolio components is the differences they may have in the context for teaching. The general and special teacher are perceived by many to have different roles, and to some extent, these differences are reflected in their training. These perceptual and training differences lead to a different context in which artifacts are produced. The contextual differences are very important to identify so that one realizes how the contexts inform the possibilities. The need for a contextual understanding has led Collins (1991) to state that proper interpretation of a portfolio requires the inclusion of a professional biography, a description of the school and community setting, and a description of the school environment. Additionally, a client description for the kind(s) of special needs children who are involved may be a necessary inclusion.

The purpose of this study was to compare general education administrators (principals and superintendents) with special education administrators and special education teachers to see if there were differences in terms of their (a) knowledge of portfolio assessment, (b) attitudes toward the use of portfolio assessment, (c) beliefs about its use in hiring decisions, (d) the place of creativity in portfolio assessment and (e) the potential components that might be included in an academic employment portfolio for teachers.

**Method**

This study was an expansion of data collected as a pilot study on assessment techniques and issues at the college level. Funded in part by the Oklahoma State Board of Regents, a comprehensive competency-based assessment project was launched at a large land-grant university. Multiple committees were formed to conduct preliminary studies on various techniques. One study was the investigation of the perceptions of administrators regarding the use and structure of portfolios in teacher education. The details of this preliminary study have been reported in Coombs and Bull (1994). Adaptations of the instrument and an expansion of the population allowed the exploration of the research questions for the present study.
Instruments

The instrument used in the Coombs and Bull (1994) study was adapted into several forms for use in this study. It contained items about knowledge and attitudes related to portfolio, the relationship of the portfolio to the hiring decision, the relationships with creativity and risk-taking behaviors and an assessment of the desirability of components as parts of the teaching portfolio. To generate the product list for potential components, 47 faculty were surveyed as were 363 undergraduate students in teacher education classes. Their comments as well as examples from the literature were used to generate the portfolio components list.

Several forms of the instrument were needed for this study. In the Oklahoma sample, the questionnaire was split into two parts. This division was necessary because the questionnaire was sent by mail and the length of a survey instrument is known to affect the response rate. The participants in Utah and New Mexico were given the entire instrument.

The response rate for the Coombs and Bull (1994) core study was 40% (by mail questionnaire). Response rates for instruments collected in classes were nearly 100% and an 84% response rate was achieved with administrators at the New Mexico statewide special education meeting.

Sample

The various samples for the study were: elementary and secondary principals and superintendents, randomly selected from a list of all such officials in Oklahoma. Details of this sample are reported in Coombs and Bull (1994); Oklahoma special education administrators and teachers who were enrolled in classes at Oklahoma State University during the spring semester of 1994; Utah administrators and teachers who were enrolled in classes at the University of Utah during the spring semester of 1994; and New Mexico special education administrators who completed the questionnaire at a statewide special education meeting. At least seventy-five percent (75%) of all respondents were from rural or small schools.

Data were analyzed using a SAS program for personal computer. ANOVA procedures were conducted for between groups comparisons (1 x 3 analysis of variance by item). Descriptive statistics were calculated for items by groups.

Results

There are five sets of questions on the full and extended instrument. The first question set dealt with portfolio assessment and the hiring decision. Results indicate general agreement among teachers, special education administrators and general administrators that portfolio assessment: (1) will provide hiring information not available using other methods, (2) is not too time consuming, (3) can be understood by school boards, and (4) can be used by administrators. Upon examination of the ANOVA results, special education administrators were more likely to strongly disagree than general administrators and teachers ($F_{2.283} = 7.34, p > .007$) with the notion that a resume or curriculum vita is enough information to make an adequate hiring decision. One hundred percent of both general and special education administrators agree that portfolio assessment should be used as part of the teacher hiring decision.

The second set of questions contains items regarding perceptions of portfolio assessment in terms of uniqueness, creativity, risk taking, problem identification, and the degree to which teachers need to conform for comparison. The results indicate only three differences: (1) administrations were more willing to compare teachers to each other than were teachers ($F_{2.283} = 3.59, p > .029$); (2) teachers wanted to include more unique material in the portfolio assessment ($F_{2.283} = 3.20, p > .042$); and (3) administrators thought there was more risk-taking exhibited by teachers in the use of portfolio assessment ($F_{2.283} = 3.88, p > .022$).
The third question set was used with special education teachers and general administrators only. The questions assessed attitudes toward portfolio assessment. Typical content of these items related to preferences for the portfolio process, beliefs toward the worth of portfolio assessment, perceptions of choice in portfolio use, potential for risk-taking, fairness of portfolio assessment, empowerment, and so forth. There were only two differences between teachers and administrators: (1) administrators favored over teachers the belief that portfolio assessment helps administrators ($F_{1,158} = 5.82, p > .017$), and (2) teachers favored the belief that portfolio assessment helps teachers be more reflective ($F_{1,158} = 8.91, p > .003$).

The fourth set of questions contains items related to cognitive knowledge about portfolios. These items presented recommendations from the literature for portfolio development using a Likert-like format to which respondents were asked to agree or disagree. Items that scored in the range of neutral or the opposite direction would rate as areas the subjects felt were unclear or they misunderstood the use of portfolio assessment. The following items were those that scored in the neutral to opposite range 2.5 - 3.5:

- Each portfolio component must have a goal statement and a reflection (an analysis of whether or not the teacher believes that the goal has been met).
- If the beginnings of a portfolio are too brief or incomplete, it is impossible to show growth or change over time.
- Portfolios are not designed to help teachers become more articulate.
- There are four classes of evidence that can be included in portfolios: artifacts, productions, attestations, and reproductions.
- Portfolios should not be used to determine the efficiency of a teacher's instruction in a given area (as shown by student products).
- A portfolio is seldom a systematic compilation of a teacher's work.
- Portfolios should not contain multiple examples of similar activities to provide repeated observations.
- Portfolio assessment is free of gender and culture bias.
- The major components of a good portfolio should not be work samples.

Results indicate significant differences between special education teachers and general administrators in relation to:

- (1) importance of portfolio goal statements and reflections - administrators rated as more important ($F_{1,159} = 8.12, p > .005$).
- (2) uniqueness and self-evaluation of teachers - rated higher general education administrators ($F_{1,159} = 12.04, p > .007$).
- (3) use of portfolio for self-evaluation - teachers rated agreement higher ($F_{1,159} = 6.37, p > .013$).
- (4) use of portfolio assessment to determine teacher efficiency - greater administrator agreement ($F_{1,159} = 4.33, p > .039$).
- (5) teachers - developed portfolio assessment objectives - teachers agreed more ($F_{1,159} = 4.33, p > .039$).
- (6) teachers should set criteria for inclusion in portfolio assessment - teachers agree more ($F_{1,156} = 18.48, p > .0001$), and
- (7) teacher empowerment as a major purpose of portfolio assessment - teachers rated higher ($F_{1,156} = 5.92, p > .016$).

The fifth set of questions contains items that were ranked by respondents as necessary to be included in portfolios. The ten top-ranked items recommended by regular administrators (in ranked order, from the top) are: (1) classroom management system, (2) (tied) multi-media presentations(s), (2) (tied) resume/vita, (4) (tied) autobiographical sketch/statement about teaching philosophy, (4) (tied) administrator evaluations of capabilities/products, (6) letters of recommendation, (7) (tied) list of extra curricular activities, (7) (tied) list of
objectives for content area, (9) description of what I want to teach, (10) lesson plan(s). The top ten items recommended by special education administrators (in rank order, top to bottom) are: (1) letters of recommendation, (2) administrator evaluations of capabilities/products, (3) (tied) resume/vita, (3) (tied) professor evaluations of capabilities/products, (5) autobiographical sketch/statement about teaching, philosophy (6) description of why I want to teach, (7) description of related experiences, (8) list of teacher assisting/aiding activities, (9) classroom management system, (10) (tied) self/peer assessment, (10) (tied) activity file. The top ten items recommended by special education teachers (in rank order, top to bottom) are: (1) (tied) letters of recommendation, (1) (tied) adapted materials (to meet the needs of diverse students), (3) (tied) autobiographical sketch/statement of teaching philosophy, (3) (tied) description of related experience, (5) classroom management systems, (6) multi-media presentation(s), (7) case study write ups (analysis of case study), (8) administrator evaluations of capabilities/products, (9) (tied) practical/applied paper(s), (9) (tied) list of objectives for content area.

Conclusions

Generally, portfolio assessment is perceived as being a positive addition to the hiring process of teachers, both by general and special education administrators. Administrators of both categories are in total (100%) support of the use of portfolio teacher evaluation. There are various positive attitudes toward the use of portfolios and toward the underlying assumptions of portfolio theory. Teachers favor the uniqueness, empowerment and self-evaluative control; whereas, administrators do not score in the opposite directions so they too indicate support for this part of the model.

Respondents showed moderate level of knowledge about the portfolio process. More knowledge seems to be needed in relation to goal statements and reflections, the need for beginning documentation (to show growth over time), the four classes of evidence, whether portfolios can be used to provide evidence of efficiency, whether portfolios should contain multiple examples of similar activities, whether they are gender and culture bias free, and the place of work samples in the portfolio. These would make ideal content for a staff development/inservice program for administrators.

Another interesting outcome comes in the rank ordering of what is considered important for each of the three respondent groups. Comparing special education administrators and teachers there are only four products common in the top ten: letters of recommendation, autobiographical sketch/philosophy, administrator evaluations and classroom management systems. When comparing regular administrators and special teachers, there were two additional correspondences, list of objectives for content area instruction and multi-media presentation(s). This would indicate that there is room for more instruction and training of teachers in terms of providing the appropriate products as part of teaching portfolios. There may also be need for training administrators on the variety provided by lower ranked products. This awareness may lead to useful information in administrative decision making.

These data are particularly useful as initial baseline measures for schools in rural areas because three quarters of the sample came from rural areas in rural states. The data also provide indications to teachers of the kinds of information typically sought by administrators in the evaluation of portfolios of special education teachers. We recommend that this data be shared with preservice students and inservice teachers who are using portfolios as part of the hiring process.

The results of this study are exploratory, so caution is necessary when interpreting the application for use of portfolios for student teacher evaluation. Practicing teachers and those entering the field may find the variability of these results helpful and may want to insure that the portfolios they develop will meet the trends discovered herein.
References


Table 1

POSSIBLE CONTENTS OF PORTFOLIOS: SUGGESTIONS FROM VARIOUS AUTHORS

Barton & Collins (1993):

Artifacts: Things produced as part of the normal work, e.g., field notes
Reproductions: Documents describing typical events which describe the work of the portfolio developer
Productions: Documents which have been prepared particularly for the portfolio, e.g., goal statements, reflections, and captions
Attestations: Descriptions of the developer's work which are created by others, e.g., recommendations or evaluations

Ryan & Kuhs (1993):

Domains of knowledge and performance
Knowledge of subject matter
Intellectual abilities and problem-solving skills
Pedagogical skills
Curriculum knowledge, insight and skill
Knowledge about learners and learning

Geiger & Shugarman (1988):

Evidence of professional responsibility
Command of the subject matter
Content-specific pedagogy
Class organization and management
Student-specific pedagogy

Urbach (1992):

Topics taught
Methods used to teach
Changes in teaching and coursework
Rigor in academic standards
Student impressions of teaching effectiveness
Student impressions of their learning
Efforts at developing teaching skills
Assessment of teaching by colleagues
Table 2

Nine Modes of Portfolio Working*

<table>
<thead>
<tr>
<th>Entries produced by the teacher</th>
<th>Informal Norms</th>
<th>Mixed Sources</th>
<th>Formal Prescriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Elective entries: Class handouts</td>
<td>Guided entries: Lesson plan for a required unit</td>
<td>Required entries: Employment application</td>
</tr>
<tr>
<td>Entries jointly produced by teacher and others</td>
<td>Collegial products: Team teaching notes</td>
<td>Negotiated entries: Shared review of teaching practice commented on by teacher and evaluator</td>
<td>Proctored entries: Situated performance assessments</td>
</tr>
<tr>
<td>Entries produced by others</td>
<td>Commentary: Letter of recommendation</td>
<td>Attestations: Surveys of students</td>
<td>Official records: Diploma, license</td>
</tr>
</tbody>
</table>

*Modified from Bird (1990)
Table 3. TYPES OF DOCUMENTS AND ARTIFACTS FOR PORTFOLIO

<table>
<thead>
<tr>
<th>Teaching Documents</th>
<th>Instructional Materials</th>
<th>Samples of Student Work</th>
<th>Academic Products Related to Teaching</th>
</tr>
</thead>
<tbody>
<tr>
<td>Syllabi</td>
<td>Course schedules</td>
<td>Projects</td>
<td>Research</td>
</tr>
<tr>
<td>Lesson plans</td>
<td>Curricula*</td>
<td>Grade book outline*</td>
<td>Practical (applied) paper(s)*</td>
</tr>
<tr>
<td>Study guides</td>
<td>Lecture notes</td>
<td>Performance videos</td>
<td>Field experiment write-up(s)</td>
</tr>
<tr>
<td>Reading lists</td>
<td>Classroom management system</td>
<td>Reduced reading level text*</td>
<td></td>
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<tr>
<td>Quizzes</td>
<td>Competency progress charts</td>
<td>Computer software</td>
<td></td>
</tr>
<tr>
<td>Tests</td>
<td>Bibliographies</td>
<td>Classroom decorations*</td>
<td></td>
</tr>
<tr>
<td>Theme box*</td>
<td>Thematic unit*</td>
<td>Multimedia presentation*</td>
<td></td>
</tr>
<tr>
<td>Transparencies</td>
<td>Bound books for students*</td>
<td>Culture study</td>
<td></td>
</tr>
<tr>
<td>Slides</td>
<td>Student worksheets*</td>
<td>Art project(s)</td>
<td></td>
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<tr>
<td>Instructional aids*</td>
<td>Project requirements</td>
<td></td>
<td></td>
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<tr>
<td>Bulletin board*</td>
<td>Reduced reading level text*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concept maps</td>
<td>Computer software</td>
<td></td>
<td></td>
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<tr>
<td>Adapted materials*</td>
<td>Classroom decorations*</td>
<td></td>
<td></td>
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<tr>
<td>Simulations</td>
<td>Multimedia presentation*</td>
<td></td>
<td></td>
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<tr>
<td>Case studies</td>
<td>Culture study</td>
<td></td>
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<tr>
<td>Learning center design</td>
<td>Art project(s)</td>
<td></td>
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<tr>
<td>Papers</td>
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<tr>
<td>Video recordings*</td>
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<tr>
<td>Photographs</td>
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<td>Audio recordings</td>
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<tr>
<td>Publications</td>
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<tr>
<td>Journal article reviews*</td>
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<tr>
<td>Research/Theory paper(s)*</td>
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</tr>
</tbody>
</table>

Assignments                  |                         |                         | Academic Products Related to Teaching |
<p>| Group Teaching Activity*     |                         |                         | Case study write-ups (analyses of case studies)* |
| Review sheets                |                         |                         | Critique of standardized tests or instruments |
| Story/poetry/puppet stage/shadow box* |                  |                         | Subject matter monographs |
| Lists of objectives*         |                         |                         |                                      |
| Handouts                     |                         |                         |                                      |
| Science experiment(s)        |                         |                         |                                      |
| Lab manual*                  |                         |                         |                                      |
| Charts                       |                         |                         |                                      |
| Individualized student materials* |                  |                         |                                      |
| Course contracts             |                         |                         |                                      |
| Activity file*               |                         |                         |                                      |
| Tables of specifications     |                         |                         |                                      |
| Research file(s)*            |                         |                         |                                      |
| Demonstration videos/films   |                         |                         |                                      |
| Other media                  |                         |                         |                                      |
| Course grade profiles        |                         |                         |                                      |
| Journal notebooks (logs, journal entries)* |            |                         |                                      |
| During-course feedback       |                         |                         |                                      |
| Completed student worksheets |                         |                         |                                      |
| End-of-course evaluations    |                         |                         |                                      |</p>
<table>
<thead>
<tr>
<th>Resume/vita*</th>
<th>Personal Documents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diary*</td>
<td>Autobiographical sketch*</td>
</tr>
<tr>
<td>Daily lesson evaluations*</td>
<td>Description of related experiences*</td>
</tr>
<tr>
<td>Professor evaluations*</td>
<td>Analysis of observations*</td>
</tr>
<tr>
<td>Self/peer assessment*</td>
<td>Administrator evaluations*</td>
</tr>
</tbody>
</table>

Statement about teaching philosophy*
Description of why I want to teach*
Letters of recommendations*
List of extracurricular activities*

Adapted from Urbach (1993)

*Starred items added to complete product survey.
CLASSROOM BEHAVIORS OF STUDENTS IN RURAL MAINSTREAMED SETTINGS: A COMPARISON OF STUDENTS WITH DISABILITIES AND THEIR NORMATIVE PEERS

In the past decade, literature in the field of special education has addressed difficulties inherent in educating children with disabilities in separate special education. A veritable barrage of criticism regarding segregated service delivery has focused on the lack of demonstrated efficacy of special education, the potentially detrimental effects of stigmatizing students with disabilities by labeling them, and the possible effects of depriving students with disabilities of their civil rights when the "dual" system of special and general education does not allow students with disabilities equal educational opportunities (Bradley, 1993; Skrtic, 1991; Stainback & Stainback, 1984; Will, 1986). Kauffman, Gerber & Semmel (1988) suggest that the assumptions made by the ideologists, although appealing, are not supported by empirical data and are arguable. Several authors have argued that the debate regarding inclusion has centered often on ideology and little on data (Braaten, Kauffman, Braaten, Polsgrove & Nelson, 1988; Kauffman, Gerber & Semmel, 1988).

Recent reports claim that nationwide over two-thirds of the 4.5 million students identified as exceptional are currently taught in general education settings. Thirty-one per cent of these students spend the entire school day in general education classes (Heward & Orlansky, 1992). Another thirty-eight percent are enrolled in mainstreamed settings on a part-time basis (United States Department of Education, 1992). Historically, rural school districts typically offered fewer special education services and had a lower percentage of self-contained special education classrooms than urban school districts. (Helge, 1984). The extent to which rural school districts have participated in the inclusion movement varies greatly from state to state and even between school districts within the same state (Shapiro, Loeb, Bowermaster, Wright, Headden, & Toch, 1993). Shortages of trained personnel, populations scattered over vast land areas, and isolation are common issues in rural school districts. These factors contribute to difficulties implementing the full continuum of special education services (Helge, 1991). Therefore, in the case of rural school districts, the movement towards inclusion may have more to do with the problems inherent in rural special education service delivery than with the assertions proposed by the ideologists.

The terms mainstreaming, inclusion, and integration reference attempts to comply with the least restrictive environment (LRE) provisions of original special education mandates (Education for All Handicapped Children Act, PL94-142, 1975). Although schools may be facing inclusion efforts for the first time, mainstreaming efforts have a longer history for the majority of both urban and rural school districts. The accumulated research literature on mainstreaming can provide useful data to identify effective processes for including students with disabilities in general educational settings. Useful information can also be derived from observational data collected from mainstreamed classrooms in rural school districts.
OBSERVATIONAL METHODS

Direct observation methods have traditionally been used to measure treatment effects. This methodology has also been employed by researchers studying the effects of mainstreaming on the behaviors of students and teachers. Using direct observation of the behaviors of students in mainstream settings can provide empirical data for assessing levels of engagement of students with disabilities. Direct observational methods are also useful in noting discrepancies between the students' behavior and that of their normative peers (Forness & Esveldt, 1974; Walker & Hops, 1976). Obtaining this comparative data on students with disabilities and their normative peers provides valuable data regarding the acceptable levels of behavior tolerated in the mainstream and considered "normal." Recording systems that describe and record a reasonably comprehensive number of student behaviors may be most efficacious for presenting the behaviors of target students, and normative peers in a classroom environment.

Selection of the comparison samples is very important to consider. The comparison sample provides the context for interpreting the normative acceptable behavior. Paired comparisons which use only one or two selected peers and/or teacher selected peers may introduce unnecessary bias. Collecting observation data on the behaviors of students participating in the same classroom experience provides a representative context for interpreting the observed behaviors of students with disabilities (Walker & Hops, 1976).

The complexity of the mainstream setting is evidenced in the uniqueness of normative behavior patterns, and variety in classroom activity structures. These considerations represent critical classroom features for planning and monitoring systematic inclusion of students with disabilities. Observation methods provide a particularly suitable means of gathering valid and reliable data to explore the unique features of rural mainstream classroom environments. Additionally, observational data assists in identifying effective approaches for successful mainstreaming.

The purpose of this study was to collect observational data on the behaviors of students with disabilities so as to compare their behavior to that of their normative peers in the same classroom. Specifically data was collected to ascertain if students with disabilities interacted differently with teachers and peers than did their normative peers in the mainstream setting. We also sought to determine if students with disabilities differed in the amount and quality of observed academic engagement than their normative peers.

METHODS

SAMPLE

Observations were conducted in three north central rural West Virginia school districts. Seventy-one observational sessions were conducted in 48 classroom settings. The classroom observations included grade levels 3rd through 7th. Data were collected over a four week period in the second semester of the academic year. A total of 71 students with disabilities were observed. Based on the West Virginia categorical service delivery model, 13 were students with mild mental impairments, 45 were students with learning disabilities, and 13 were students experiencing behavior disorders. All students had been included in the classroom for at least one month. Each classroom contained a range of 12-26 students with a mean of 21.3. Each classroom contained a range of 1-8 students with disabilities with a mean of 2.3. The number of adults in each classroom ranged from 1 to 3 with a mean of 1.2.
CLASSROOM BEHAVIOR RECORD (CBR)

The Classroom Behavior Record (CBR) developed by Fitzgerald, Nichols, & Whittaker (1992) was used to collect the data for this study. The Classroom Behavior Record is an observational tool for collecting systematic observations regarding the behavior of children with disabilities. The CBR provides for the recording of fifteen discrete classes of behavior in six second intervals in which recording of the behavior of a targeted student is alternated with recording the behavior of each member of the peer group in the classroom in rotating fashion.

Six second intervals were cued by a beeper mechanism. These sounds were heard only by the observer through an ear piece. All observational and demographic data were recorded on CBR protocols. Classroom behaviors observed were coded according to the following behavioral definitions:

Positive Behavior Codes

AT ATTEND/ON TASK
On-task school-related behavior. Student attends to material or activities assigned or approved by the teacher. Seatwork. Quiet, approved play. May include incidental sound that is not distracting. Self-directed speech may be coded AT or as a special variable.

IM INCIDENTAL MOTOR
Low level motor activity that does not distract oneself or others. Student is on-task or otherwise engaged in teacher-approved activities.

II INSTRUCTIONAL INTERACTION
Instructional interactions around academic or instructional content. Recitations in class, hand raising, contributions of ideas to class, group response to teacher's question. Verbal or nonverbal prompting may be coded II or as special variable.

PP POSITIVE WITH PEER
Verbal or nonverbal interactions with peers that are not in violation of classroom rules. May be of academic or non-academic content.

PT POSITIVE WITH TEACHER
Verbal or non-verbal interactions with teacher that are non-academic but are school-appropriate. Must be initiated by the student or as a pleasant response to a teacher-initiated interaction.

CO COMPLY
Compliance with a verbal or non-verbal direction, command, threat or rule made to the student individually or as one of a group. Does not include requests for an answer to an academic question. Code only in the first interval compliance can reasonably be expected after the command (up to 12 sec. is allowed).

AG APPROVAL GAINED
Verbal or non-verbal approval gained from the teacher or another adult directed toward the student alone or as part of a group. Teacher's approving statement, physical touch, or reward of a token or point. Approval may be a general positive statement or it may be contingent upon a specific behavior.

V1 OPEN VARIABLES
Specific positive behavior or combination of positive behaviors are selected for tracking because they are unusual or significant in a given observation or not adequately described in the routine
behavior code. Usually given precedence over other coding options as they are of special interest to the observer.

Negative Behavior Codes

FA **FAIL TO ATTEND/OFF TASK**
Off-task, non-verbal behavior. Student attends to materials or activities other than those assigned by the teacher. Looking around with wandering gazes or preoccupied stare, watching other students, looking at non-assigned materials. Not obtrusive or disruptive.

PL **PLAY WITH OBJECT**
Off-task, nonverbal behavior where student manipulates an object or playing with toys or materials.

MN **MOTOR/NOISE OBTRUSIVE**
Obtrusive, often repetitive motor or noise behaviors that demonstrate restlessness, inattentiveness, impulsivity, self-stimulation, or minor rule breaking. Wiggling in seat, nose picking, distracting vocal or non-vocal sounds. This may occur when student is out-of-seat, so long as student is not disruptive to others. Behaviors are obtrusive in classroom but do not cause disruption. Unusual self-absorbing behaviors such as spinning, self-abusing, hand-biting, or masturbating may be coded MN or as special variables (V3, V4).

DD **DISRUPTIVE, DESTRUCTIVE**
Actions that disrupt classroom process. Loud talk or noises, high-rate or intense motor behaviors, throwing or spoiling materials, tantrums, loud whispering. Includes out-of-seat behavior if student is disruptive to others or potentially disruptive to others.

NP **NEGATIVE WITH PEER**
Verbal or nonverbal interactions with peers that are unpleasant, asocial, nasty, aggressive, or otherwise in violation of classroom rules. Student hits or trips, jerks or wrenches object away, throws object at peer, or calls peer a name. Includes whispering if against classroom rules.

NT **NEGATIVE WITH TEACHER**
Verbal or non-verbal interactions with teacher that are unpleasant, aggressive, or otherwise in violation of classroom rules. Swears at teacher, pushes, responds with "smart" remark. Must be initiated by the student or as a negative response to a teacher-initiated interaction.

FC **FAIL TO COMPLY**
Failure to comply with a verbal or non-verbal direction, command, threat or rule made to the student individually or as one of a group, does not include inability to respond to an academic question. Code only in the first interval compliance could reasonably have been expected after the command (up to 12 sec. is allowed). Noncompliance may be coded on successive intervals.

DG **DISAPPROVAL GAINED**
Verbal or non-verbal disapproval gained from the teacher or another adult directed toward the student alone or as part of a group. It may be general or it may be contingent upon a specific behavior. Includes teacher's physical intervention with student, rebuke, removal of tokens or points, a direction given to a student that includes disapproval, or placement of student in time-out. Time-out
may be coded as a special variable (V3, V4).

**V1 OPEN VARIABLE**

**V2** Used when Observer wishes to track selected negative behavior or combination of negative behaviors of particular importance or not adequately described in a routine behavior code. Usually given precedence over other coding options possible during interval as they are of special interest to the observer.

The CBR video disk training program is designed to provide the observer with tutorial instruction for learning the codes and the decision-making rules for coding. Both short and long practice sessions are included to build coding fluency and accuracy. Video scenes depicting various learning environments allow the observer to practice coding skills. Also included in the training program is a computerized explanation of the coding concepts and rules of precedence for decision-making. The CBR video disk training program guides the observer through a series of tutorials and practices.

Five observers were trained using the CBR video disk training program for over 15 hours until each observer reached 85% reliability on three practice videos. During the data collection, observers were retested on the practice videos. All observers continued to attain over 85% reliability in behavioral coding. Inter-observer reliability measures, obtained during 5 field observations in rural classrooms, produced a range from .85 to .89.

**PROCEDURES**

Observations ranged from minutes to 1 hour in length with a mean of 27 minutes. The length of the observation corresponded to what the observer perceived as a naturally occurring classroom event (i.e. teacher directed math instruction, classroom discussion, seatwork, small cooperative learning groups). Students and teachers in the classroom were blind to the purposes of the study and were told the observation was being made for general educational purposes.

Following data collection all protocols were scored by the observer and checked by another member of the research team. Errors in scoring were minimal, amounting to less than 3% of the total. Demographic data and scores on each of the CBR variables were entered for analysis and checked by a third team member. Missing data amounted to less than 4% of the total.

**RESULTS**

In order to account for the differing lengths of observations, standard scores were calculated by dividing the raw score in each CBR category by the total time of each observation. Standard scores were used in analysis. ANOVAs were employed to test for differences between students with disabilities and their normative peers on scores in each CBR category. Differences between these groups in fourteen CBR categories were non-significant.

In order to ascertain if there were significant differences in teacher interactions between students with disabilities and normative peers, scores of five CBR variables reflecting teacher interaction with students were summed. The five combined variables were: INSTRUCTIONAL INTERACTION APPROVAL GAINED, DISAPPROVAL GAINED, NEGATIVE WITH TEACHER, POSITIVE WITH TEACHER. ANOVA between students with disabilities and their normative peers indicated no significant differences.

The data was examined to compare the quality and amount of peer interactions between students with disabilities and their normative peers (POSITIVE WITH PEER (PP), NEGATIVE WITH PEER (NP)). Differences regarding either positive and negative interactions were not
significant.

ANOVA calculated for students with disabilities versus normative peers was significant on the CBR variable ATTEND/ON-TASK (AT), (F= 3.08, p< .01). CBR scores on the AT variable for students with disabilities observed in this study were significantly less than their normative peers.

To explore which various classroom factors may have had an effect on attention, correlations were conducted on AT scores and various classroom demographies (i.e. class size, number of students with disabilities in classroom and number of adults in classroom). ANOVA was conducted comparing the AT scores of students with disabilities in classrooms with one adult versus the AT scores of students with disabilities in classrooms with two or three adults. The AT scores of students with disabilities in classrooms with 2 or 3 adults was significantly lower than the AT scores of students with disabilities in classrooms with only 1 adult (F=10.624 p<.0014).

DISCUSSION/IMPLICATIONS

These results feature several points that are important in the examination of rural mainstream settings. Overall, students with disabilities were not observed as differing from their normative peers on several important measures that reflect critical aspects of classroom life. Students with disabilities were not observed to receive either significantly more or less teacher interaction than their peers in the classroom. Students with disabilities were not observed to differ significantly in measures of peer interaction than their normative peers. Therefore, the social interactions of students with disabilities with peers and teachers were quantitatively and qualitatively comparable to that of their normative peers. Students with disabilities were not observed to differ significantly in measures of instructional interaction with the teacher than their peers in the classroom. Students with disabilities did not receive significantly more negative social interaction nor did they consume more instructional interaction from the teacher.

Of critical concern is the finding that students with disabilities are significantly less likely to be observed as attentive (AT) than their normative peers in mainstreamed classroom settings. This finding contradicted any existence of obtrusive overt problematic behaviors. Students with disabilities were displaying passive off task behaviors that restricted their scores regarding ATTEND/ON-TASK (AT) but did not produce overt behaviors that might serve as strong signals to their teachers that they are not attending to class activities. Given the complexity of classrooms, teachers may fail to notice inattention whereas more obtrusive behaviors typically warrant immediate teacher response.

It is unclear if the discrepancy regarding attentive behavior between students with disabilities and their normative peers indicates problems in focusing attention, maintaining attention and/or distractibility. The challenge identified is the need for approaches to catch and hold students attention. When students are unable to attend, a commonly suggested intervention is the placement of additional instructional personnel into the classroom environment (Reif, 1993). The results of this study appear to contradict this suggested intervention. The presence of additional adults was associated with lower levels of attending for students with disabilities. Regardless of the benefits of additional adults in the classroom, it may be that the presence of additional adults in mainstream settings makes the environment more complex and negatively impacts the attention levels of students with disabilities.

The limitations of the findings from this study should also be considered. The data collected was limited to observed behaviors within the parameters of a categorical observation system. The study had no access to measures of student achievement or of products in the classroom. Therefore, it is possible that what appears as inattentive behavior may be accompanied...
by learning that is simply not observable. Further we had no knowledge about the roles of additional adults in the classroom. In some cases additional adults were instructional assistants. In other cases, these individuals were co-teachers or parents. Therefore, it is difficult to speculate about whether these adults had defined teaching roles and responsibilities in ways that might improve student attention to task.

In summary, the findings from this observational study indicate that the behaviors of students with disabilities in rural mainstream settings are not overtly different from their normative peers. Students with disabilities do not display behavioral challenges that are likely to instigate immediate teacher response and attention. However, students with disabilities did display differences in attending behaviors. Given the probable relationship between academic engaged time and learning (Rosenshine, 1979) there is sufficient evidence to be concerned about the suitability of these settings for meeting the individual learning needs of students with disabilities.
REFERENCES:


A COMPARISON OF LEISURE AND RECREATIONAL ACTIVITIES FOR ADULTS WITH AND WITHOUT MENTAL RETARDATION

The importance of recreation and leisure activities for persons with handicapping conditions has been well documented in the literature, as have the issues facing this area of need (Dattilo & Rusch, 1985; Falvey, 1989; Patton, Beirne-Smith, & Payne, 1990; Schleien & Larson, 1986; Schloss, Smith, & Keihl, 1986). Recent research has demonstrated that persons with handicaps can successfully indulge in recreation and leisure skills (Falvey, 1989; Schloss et al., 1986).

Although documentation of benefits exist, several barriers have been noted to inhibit successful promotion of skill development and programming (Dattilo et al., 1985; Patton et al., 1990; Schloss et al., 1986; Schleien et al., 1986). For example, one barrier identified by Schleien & Larson (1986), was that the majority of programs for recreation are still essentially segregated. The segregation may be due to such things as limited information regarding availability of opportunities, limited social skills, and programs in isolated settings (Schloss et al., 1986). Another example contributing to the restriction of activities is that many individuals do not have specific skills necessary due to a lack of sufficient instruction or experience (Patton et al., 1990). Because development of play and leisure skills does not occur spontaneously in individuals with mental retardation, specific programming is needed to facilitate involvement (Fine, Welch-Burke, & Fondario, 1985).

Factors preventing optimal training for leisure and recreation could leave individuals with little opportunity for choice, which in turn may enhance feelings of failure and of learned helplessness (Dattilo et al., 1985). Individuals with mental retardation need the opportunity to exhibit self-initiation and self-determined behavior (Dattilo et al., 1985; Nietupski et al., 1986). Such abilities allow an individual to take responsibility for their own choices and actions (Gardner, 1992). The importance of this is evidenced in efforts such as The Self-Determination Curriculum Project, in which development of such competencies is emphasized in teaching youth with disabilities (Gardner, 1992). Though choice is of critical importance in leisure and recreation programming, the element of choice-making has received relatively little attention in the education of the handicapped (Guess et al., 1985).

In reaction and recognition to the need for recreation and leisure opportunities and programming a number of published papers and curricula have been reported and developed in order to identify essential elements associated with recreation and
Leisure for individuals with handicaps (Falvey, 1989). The critical characteristics identified most often included (1) a need for activities that are chronological age appropriate (Falvey, 1989; Schleien et al., 1986; Schloss et al., 1986), (2) interaction with nonhandicapped peers (Wacker et al., 1984), (3) integration in the community or natural setting (Falvey, 1989; Schleien et al., 1986; Schloss et al., 1986), and (4) opportunities for self initiation and choice (Dattilo et al., 1985; Falvey, 1989; Guess et al., 1985; Nietupski et al., 1986). In order to enhance optimal leisure functioning in individuals with mental retardation, direct inclusion of skill development should be in their education and habilitation plans (Fine et al., 1985). The present authors agree.

Individuals with disabilities can only function independently when given access the opportunity. Communities are beginning to recognize the importance of recreation and leisure opportunities for persons with mental retardation by enabling them to choose and participate, therefore acquiring a sense of enrichment and accomplishment (Patton et al., 1990). Participation in leisure activities should be considered a critical dimension in the life and personal fulfillment of an individual with mental retardation (Fine et al., 1985).

Hoover, Wheeler, and Reetz (1992) reported the development of a leisure satisfaction scale designed for adolescents and adults with mental retardation. Regarding individuals with mental retardation, they noted "The lack of information generated from consumers is unfortunate given the personal choice components central to the experience of a quality leisure life" (Hoover, Wheeler, and Reitz, 1992, 154). As noted previously, opportunities for self initiation and choice should receive more attention.

A recent paper by Hayden, Lakin, Hill, Bruininks, and Copher (1992) addressed the social relationships and leisure activities of 336 adults with mental retardation. The study addressed different types of living arrangements, friendships, neighborhood integration, family involvement, daily activities, and support for integration from care providers. One of the important findings focused on the need for additional attention relative to the daily activities of adults with mental retardation living in the community.

This manuscript focuses on leisure or recreational activities that people participate in or select when given a choice. It was conceptualized following a study by Butler (1988) in which the preferences of leisure and recreational activities for a group of adults with mental retardation were identified. This current study, following a similar design, was conducted to generate a representative list of leisure or recreational activities from a group of adults without mental retardation, and to compare and contrast the two sets of data.
As previously noted, this study follows one conducted by Butler (1988) in which 548 adults with developmentally disabilities/mentally retardation living in 30 Mississippi counties, the vast majority of whom lived in supported living arrangements rather than at home, were surveyed. Specific demographic data were not recorded by the interviewers; they simply reported more males than females, while the racial composition included both white and African American individuals. Specific psychometric data were also unavailable, but most of the subjects interviewed were at least moderately retarded; many, if not most, had lived previously in residential institutional settings. Approximately 60 service providers conducted informal open ended interviews using a survey (needs assessment) in regard to living arrangement needs, competitive employment/work training needs, leisure needs, and miscellaneous needs. The element regarding leisure time needs referred to activities the individual did or would choose to do for fun, entertainment, and/or recreation in their free time. Specific questions included: "What are the things you do for fun (recreation) when you are not working?", "What are the fun things you would do if you could?", and "How do you spend your free time (nights, weekends) away from work?". The questions were presented in individual interviews, and questions were restated and reworded if necessary in order to obtain the most candid and accurate information regarding future wants and needs.

The current study used the same questions but for a different population, consisting of nearly 300 college and university undergraduate and graduate students; many of the students were majoring in special education and studying mental retardation, while others were regular education majors. Again, specific demographics were not recorded, but there were more females than males. The data were obtained by group rather than individual basis, with subjects listing their preferences on paper. The subjects had no knowledge of the purpose of the survey other than for reasons of inquiry.

Results revealed various responses of preferred leisure or recreational activities chosen by the subjects from both groups. Table 1 lists those items that were either most frequently mentioned, or characteristic of the responses given by each group.

The authors', with only a few exceptions, perceive the two lists as remarkably similar. As illustrated in the list generated by the population with mental retardation, sixty to seventy percent of the activities are not necessarily a direct function of cognitive ability, indicating such ability is not specifically a determinant in the extent to which one may participate or enjoy their leisure time.

As noted earlier, persons with handicaps can successfully participate in leisure and recreational activities (Falvey,
The results of this investigation do indeed indicate that individuals with mental retardation have essentially the same interests and desires relative to recreation and leisure time. Specific skill development or enhancement may be needed in programming efforts in order to compensate for possible gaps in experiences or instruction (Patton et al., 1990; Fine et al., 1985).

Although specific instructional strategies for including recreation and leisure into the curricula are relatively recent in development, educators have a respectable base of literature from which to pull approaches. In reviewing the literature, certain issues appeared throughout the research base.

First, what skills specifically should be taught to young adults with mental retardation? The basis for content should focus upon the preference or choice made by the individual with mental retardation (Jeffree & Cheseldine, 1984; Schleien et al., 1994; Wehman & Schleien, 1980; Reynolds, 1981). Individuals participate in leisure activities because they enjoy them, but the selection must be an informed one (Jeffree & Cheseldine, 1984). Though the students can communicate their desires, they must be made aware of options. Individuals with mental retardation may not be aware of their options, or even of their broad selection of free time activities from which to choose. Educators should consider an array of normalized activities for their students, rather than the stereotypical segregated or passive activities.

Another factor determining selection of recreational activities for individuals with mental retardation is the age-appropriateness of the choice (Wehman et al., 1985; Schloss et al., 1986; Schleien et al., 1994). Choices made by individuals with mental retardation may not be consistent with their chronological age, so it is important for educators to make individuals aware of appropriate activities, as well as making these activities both feasible (through necessary adaptations) and accessible. Individuals with mental retardation should involve themselves, to as much an extent as possible, in events their same age peers would. In assessing the desires of individuals with mental retardation, it was found that activities perceived as important were those selected by nondisabled peers.

In addition to choice and age-appropriateness, the learning environment is an important element in successful recreational programming. The setting for instruction should occur across all environments, with particular emphasis on home and community (Nietupski et al., 1984). Preparation for all environments should begin early in an individual's education, this enables participation to be the fullest extent possible (Schleien et al., 1993). Wehman et al., (1985) believe that instruction must occur outside of the classroom if parents are to perceive training as credible. It cannot be assumed that skills taught
in the school setting will transfer to other environments, therefore, the natural settings in which the individual would ideally spend time in pursuit of leisure is the setting in which training should occur.

Once appropriate environments are identified, assessment of the setting and materials is necessary (Wehman et al., 1985; Schleien et al., 1994). Necessary adjustments or adaptations in the setting can alleviate the potential for future problems or difficulties, while making instruction enjoyable and free of undue frustration (Wehman et al., 1985).

When selection of skills and appropriate settings is complete, the process of training the identified leisure activity is needed. Student's deficits in their desired activity are identified and those areas are addressed (Fine et al., 1985). These skills are then systematically taught to the individual with adaptation as proficiency occurs (Wehman et al., 1985), and reduction in assistance as acquisition and maintenance increase (Schloss et al., 1986). As training continues, research shows that active involvement of the individual increases as passive participation decreases (Jeffree & Cheseldine, 1984).

A final element involvement of key resource people. Collaboration is a foundation to successful programming and transition for young adults with mental retardation. The working relationship between home, school, and community should be a primary goal of an educator striving for successful recreational programming (Fine et al., 1985). Networking among professionals is necessary to promote quality services for individuals with disabilities (Schleien et al., 1990; Wehman et al., 1985). Involvement of concerned individuals could supplement and enhance the recreational programming of an individual with mental retardation.

Barriers are currently present in our delivery systems and in our public schools. An acknowledgement of these barriers and informed approach to overcoming them is the first step to realizing successful recreational curricula in our schools, homes, and communities.

The concepts of choice, age-appropriateness, systematic skill instruction, and collaboration are building blocks to the development of a recreation repertoire in the lives of individuals with mental retardation. When empowered with the ability to participate, lives are enriched. These efforts allow individuals to be active and successful members of the community.
References


TABLE 1

Selected Leisure and Recreational Activities

<table>
<thead>
<tr>
<th>NON-RETARDED</th>
<th>RETARDED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Go antique shopping</td>
<td>Have a truck and a bass boat</td>
</tr>
<tr>
<td>Attend plays</td>
<td>Drive a ski boat</td>
</tr>
<tr>
<td>Go to sports events</td>
<td>Go to the movies more</td>
</tr>
<tr>
<td>Go to bars</td>
<td>Go on a real vacation</td>
</tr>
<tr>
<td>Browse bookstores</td>
<td>Build a doghouse for my dog</td>
</tr>
<tr>
<td>Ride in boats</td>
<td>See a pro basketball game</td>
</tr>
<tr>
<td>Build things</td>
<td>Ride in an 18 wheeler</td>
</tr>
<tr>
<td>Do yardwork</td>
<td>Take care of animals</td>
</tr>
<tr>
<td>Go camping</td>
<td>Learn to play a piano</td>
</tr>
<tr>
<td>Go to church</td>
<td>Meet new people</td>
</tr>
<tr>
<td>Cook</td>
<td>Learn to swim</td>
</tr>
<tr>
<td>Go for drives</td>
<td>Get a dog</td>
</tr>
<tr>
<td>Go out to eat</td>
<td>Fly in a plane</td>
</tr>
<tr>
<td>Fish</td>
<td>Water ski</td>
</tr>
<tr>
<td>Spend time with family</td>
<td>Learn to ride a bike</td>
</tr>
<tr>
<td>Gardening</td>
<td>Do aerobic exercises</td>
</tr>
<tr>
<td>Play golf</td>
<td>Visit with my mom</td>
</tr>
<tr>
<td>Hike</td>
<td>Buy a VCR</td>
</tr>
<tr>
<td>Listen to music</td>
<td>Go on a picnic</td>
</tr>
<tr>
<td>Go mountain climbing</td>
<td>Whittle</td>
</tr>
<tr>
<td>Make love</td>
<td>Travel to Europe</td>
</tr>
<tr>
<td>Go to the movies</td>
<td>Date young lady I met at mall</td>
</tr>
<tr>
<td>Paint</td>
<td>Go deep sea fishing</td>
</tr>
<tr>
<td>Ride horses</td>
<td>Go to a country music show</td>
</tr>
<tr>
<td>Read a book</td>
<td>Spend more time with boyfriend</td>
</tr>
<tr>
<td>Ride a bike</td>
<td>Go to a boxing match</td>
</tr>
<tr>
<td>Sail</td>
<td>I would like to have sex</td>
</tr>
<tr>
<td>Sit on the porch</td>
<td>Shop for my own clothes</td>
</tr>
<tr>
<td>Sleep</td>
<td>Learn to play soccer</td>
</tr>
<tr>
<td>Spend time with spouse</td>
<td>Go out to clubs</td>
</tr>
<tr>
<td>Watch television</td>
<td>Go to Bourbon Street</td>
</tr>
<tr>
<td>Travel</td>
<td>Play volleyball</td>
</tr>
<tr>
<td>Play tennis</td>
<td>Learn to cook</td>
</tr>
<tr>
<td>Visit with friends</td>
<td>Learn to play tennis</td>
</tr>
<tr>
<td>Walk</td>
<td>Go deer hunting</td>
</tr>
<tr>
<td>Watch sunsets</td>
<td>Play more sports</td>
</tr>
<tr>
<td>Write</td>
<td>Hike</td>
</tr>
<tr>
<td>Play with children</td>
<td>Play cards</td>
</tr>
<tr>
<td>Rent movies</td>
<td>Do woodwork</td>
</tr>
<tr>
<td>Play cards</td>
<td>Get married</td>
</tr>
</tbody>
</table>

BEST COPY AVAILABLE
Grade Retention and Parental Aspirations for Students with Learning Disabilities

Grade retention is the practice of requiring a student to repeat a year of academic instruction in a particular grade (Jackson, 1975). The practice of retention is one of education's most common interventions for low achieving students. A recent report found that approximately 6% of all school-age children are retained each year (CPRE Policy Brief, 1990). Concurrently, a stratified national sample included in the National Educational Longitudinal Study of 1988 (NELS:88; National Center for Educational Statistics, 1989) reported that 19.3% of public school students studied were retained at least once in kindergarten through eighth grade. Eight percent of these students experienced their retention in kindergarten or first grade.

Although retention has existed as an educational practice since school systems organized their students into grade levels in order to provide teachers with homogenous student groupings (Bucho, 1986), the debate over the effectiveness of retention continues. The attitudes on retention held by parents and educators are not supported by research on the effectiveness of the practice of nonpromotion. Public opinion supports retention unless the student can pass grade-and-curriculum-appropriate examinations (Elam, 1990; Frymier, 1989; Tomchin and Impara, 1992). Parents of non-public and public school children supported retention of students unable to achieve at expected levels.

Tomchin and Impara (1992) examined teacher beliefs regarding the use of retention in grades kindergarten through seventh. Nearly 98% of teachers surveyed supported the practice of retention. Over 82% felt that retention could be a positive step as it prevents students from facing daily failure at the next higher grade. Over 69% of teachers indicated that
knowing retention is a possibility motivates students to work harder. The majority of teachers (64.7%) felt that retention was necessary to maintain grade level standards but also recognized (72.6%) that retention does not prevent classrooms from having a broad range of student achievement. Nearly 70% of teachers indicated that students with learning disabilities should not be exempt from retention practices.

Particular parent attitudes and behaviors have been associated with the practice of retention (Reynolds, 1992; Palladino and Shepardson, 1991.) The first is the parent's estimate of the child's ability (Cadigan, Entwistle, Alexander, & Pallas, 1988). Parents who feel their child is not capable of doing as well as his/her peers may convey this attitude to school officials resulting in retention being considered in the child's best interest. While parents who feel their child is relatively bright despite poor academic performance may be able to sway a decision for promotion. Students who are frequently tardy are more likely to be retained than students who are not. Lateness during the elementary years is considered a parent variable as the child has little control over it.

Reynolds (1992) reports, based on his research, that parent involvement and school mobility predicted the decision to retain low achieving students. Children whose parents were rated as more involved in school activities were 18% less likely to be retained. Children who changed schools once between kindergarten and second grade were 7% more likely to be retained than students with similar low achievement.

The central question in the retention debate is whether or not retention is an effective treatment for children who display delayed academic progress. The literature on the effects of retention shows either sizeable negative effects of grade retention in academic achievement, personal adjustment, attitude toward school, behavior, and attendance (Holme & Matthews, 1984; Reynolds, 1992) or no effects (Jackson, 1975; Stcver, 1990). A review of 63 studies of effects of retention (Holmes, 1989) suggests that children who are considered for retention but instead promoted gain more in terms of achievement on standardized tests comparable children who are retained.
In a study testing the effects of early grade retention on reading and math achievement in fourth grade for 1255 low-income mostly Black children, Reynolds (1992) found that retention had substantially negative effects on achievement in reading and mathematics. In this study, the matched-control-group analysis compared all retained students with 200 promoted students matched on reading and math achievement. Retainees performed 8 months lower in reading achievement than demographically similar and equally low-scoring promoted children after adjusting for effects of other variables in the model. In the area of math achievement, retainees performed 7 months lower than similarly matched promoted children. The findings of this study did not support grade retention as an educational practice for children at risk.

A recent study examining high school students with a history of grade retention compared to a matched control group of non-retained students found retained students scored lower on a number of variables (Palladino & Shepardson, 1991). The students who were retained experienced lower scores in achievement and intelligence. Their grades were lower with higher absenteeism. They also scored lower than peers on three subscales of a self-esteem measure (The Self-Perception Profile for Adolescents). This is consistent with the findings of a comprehensive study on the effects of retention concluding that grade repetition is detrimental to social and personal development (Goodlad, 1954).

Palladino and Shepardson (1991) also examined the relationship between the grade retained and measured variables using the Pearson Product-moment correlations. They found that retention in the upper elementary and middle school levels was associated with lower grades, less positive school attitudes, less time on homework, lower educational expectations, higher levels of reported discipline problems, lower self-control, and greater externalizing of responsibility.

Holmes and Matthews (1984) conducted a meta-analysis of 650 studies on grade retention and stated "those who continue to retain pupils at grade level do so despite cumulative research evidence showing that the potential for negative effects consistently outweighs positive outcomes..."
There seem to be clear indications that the practice not only fails to remediate children's academic problems, but is also associated with poor self-esteem, negative attitudes towards school, and higher drop-out rates (Byrnes & LamAmoto, 1986; Grissom & Sheppard, 1989).

Researchers of drop out phenomena have consistently found a significant relationship between grade retention and dropping out. Grisson and Shepard (1989) conducted three large-scale studies, involving 20,000 to 80,000 students each. They examined the relationship of retention to dropping out after controlling for achievement. They found that with equally poor achievement, students who repeated a year were 20 to 30 percent more likely to drop out of school. In a study conducted by the Association of California Urban School Districts (1985), drop outs were found to be five times more likely to have repeated a grade than high school graduates. Students who repeated two grades had a probability of dropping out of nearly 100 percent.

These results are particularly relevant for students with learning disabilities as the drop out rate for these students is extremely high. Zigmond and Thornton (1985) have found that 54% of students with learning disabilities who start ninth grade quit before graduation.

McLesky and Grizzle (1992) investigated grade retention of students with learning disabilities. Of 689 students with learning disabilities studied in Indiana, 58% had been retained prior to identification. For students without disabilities, the retention rate was approximately 25% of the general population in Indiana (Cummings, Hall, McCarthy, & Snyder-Gilbert, 1987). So the retention of students with learning disabilities was twice that of the non-disabled student population.

The present study was designed to address retention of students with learning disabilities and parental educational aspirations relative to retention. Specifically, this study looks at the rate at which students with learning disabilities in North Dakota are retained and parental aspiration for these students at the post-secondary level.
Method

The data for this investigation were collected in North Dakota during the spring semester of the 1992-1993 school year. Parents of students identified with a learning disability in three regional consortiums for special education services were sent questionnaires. The questionnaire requested information regarding retention and educational aspirations for their child. The sample included all parents of students with learning disabilities (K-12) in the selected regional consortiums. Questionnaires were sent to 503 parents with 251 responding.

Parents were asked to indicate the age and grade of retention, if the child had been retained. They were also requested to give the age and grade of the child at initial placement into special education. Parents were then asked, if upon completion of high school, they expected their child to get a job, attend a vocational/technical school, attend a junior college (2-year), or attend a 4-year college or university.

Results

Of those parents responding, 49% reported that their child had experienced a grade retention between kindergarten and eighth grade. Of those retained, 76% were retained prior to placement in special education.

Examining the relationship of retention to parental aspirations, parents of students with learning disabilities who were retained were less likely to aspire to a 4-year educational institution than were parents of non-retained students with learning disabilities. Of the parents aspiring to a 4-year educational institution, 60.8% of them were parents of non-retained students with LD. While 57% of parents of retained students with LD expected their children to attend a vocational/technical program or junior college. Only 4% of the total parent population responding to the questionnaire expected their child to go straight from high school to a job.
Discussion

The purpose of this study was to elicit retention and post-secondary aspiration information from parents of students with learning disabilities. Parents reported that 49% of their children had been retained. This is more than twice the rate at which the general population is retained. Parents reported that of those retained 76% had been retained prior to placement into special education. These results support the findings of McLesky and Grizzle (1992) regarding retention prior to identification as a student with learning disabilities. The results of these studies indicate the probability that retention is being used as a pre-referral strategy. The efficacy of this practice is questionable based on research findings of negative effects of retention (Jackson, 1975; Cadigan, Entwistle, Alexander, & Pallas, 1988; Niklaston, 1987; Stover, 1990; Paladino & Shepadson, 1991; Holmes & Matthews, 1984; Grissom & Shepard, 1989; and Reynolds, 1992).

The results of this study also indicate that parents of students with learning disabilities who have been retained have lower aspirations for them than parents of similar non-retained students. This may be a continuation of the parent variable of estimating the child’s ability as low which plays into the initial retention of the child. This area needs further investigation before any inferences or conclusions can be drawn.

A limitation of this study is that only parents residing in North Dakota participated in the study. This reduces the generalization of results. The results of a similar study conducted in Indiana, cited earlier, forecast the results of this study in the area of retention relative to students with learning disabilities.

Based on the results of this study and the presented research literature, educators including special educators may want to explore alternatives to retention for children who are at risk for referral to special education.
References


of Educational Research, 54, 225-236.
Increased efforts at making more integrative experiences available for children particularly with more severe disabilities have recently been the subject of much professional debate. The extent to which "least restrictiveness" is practiced has been determined to be more a function of where one lives (Danielson & Bellamy, 1989) rather than individual need, severity of disability, or label. Interestingly, rural residence appears to indicate a tendency to advocate for more segregated placements (Hunt, Haring, Farron-Davis, Staub, Rogers, Beckstead, Karasoff, Goetz, & Sailor, 1993). It stands to reason that if where one lives is the determining factor in provisions for integration then people of influence who comprise placement teams in local communities somehow render different decisions for different reasons. Understanding the dimensions of the rural special educator's influence on these decisions may explain why some children are afforded less restrictive placements than others.

Results of a rural teacher survey confirm that special educators exert a high degree of influence over the placement team's decision to provide integrative experiences. Further, teachers employed in special schools and teachers within regular public schools have differing opinions about providing integrative options particularly to children with severe disabilities. Eight factors or reasons appear to guide placement decisions (Roth, in progress). With this data base, the following objectives for the presentation are outlined below:

Objectives

1. To increase the understanding of special educator's influence on placement decision making.
2. To analyze reasons for and against increased integration from the perspective of all decision making members.

3. To discern logical, legal, and student-centered reasons for increased integration versus those made for other reasons.

Presentation format:

Audience members will form groups of 4 individuals and be given role play cards reflecting dialogue from administrators, special education teachers, regular educators, and related service personnel. Background on the family and student with disabilities is consistent across groups. One-half of the groups will discuss the issues which promote integration into regular schools. The other groups will discuss those which promote segregation in special schools.

Each of the groups will have the opportunity to talk through the issues and "role play" the dialogues provided. A worksheet will have them decide on:

1. Whose opinion appears to influence the decision making?
2. What reasons are given for the decision?
3. Are the reasons legitimated in logical, legal, and/or student-centered bases?
4. And, if not, on what basis is the decision made?

Two of the groups will volunteer to act out the "role play" for the entire audience. Each of the above questions will be addressed to the audience for discussion and confirmation from the small group experiences.

The session leader will close the presentation by discussing the details of the teacher survey analysis and emphasizing the importance of listening to all concerned, particularly parents, in decision making about placement for their children.
REFERENCES


Roth, M.A. (in progress). Does where you teach make a difference? Special educator's perceptions of the benefits and limitations to increased integration.
VARIABLES AFFECTING ITINERANT MODEL SERVICE DELIVERY
IN RURAL SETTINGS

Current research indicates that the opportunity for disabled and nondisabled students to attend the same school together results in significant educational and social benefits for both groups of students (McDonnell, et al., 1991). Many studies find that integrated programs are superior to segregated programs on variables including: (1) IEP Quality and rate of IEP goal completion (Hunt & Farron-Davis, 1992; Brinker & Thorpe, 1984; Hunt, Goetz & Anderson, 1986), (2) gains in communication and social skills (Gaylord-Ross & Peck, 1985; Jenkins, Odom, & Speltz, 1989), and (3) appropriateness and frequency of interactions with peers without disabilities (Brinker & Thorpe, 1986; Gaylord-Ross & Peck, 1985; Haring Breen, Pitts-Conway, Lee, & Gaylord-Ross, 1987; Lord & Hopkins 1986; Voeitz, 1982).

Also several studies indicate that the opportunity to attend integrated educational settings contributes to the post-school adjustment of young adults with disabilities (McDonnell, et al., 1991; Brown et al., 1987; S. Hasazi, Gordon, & Roe, 1985; S. Hasazi, Johnson, J. Hasazi, Gordon, & Hull, 1989; Piuma, 1990).

In addition, integrated educational programs for students with severe disabilities also appear to have positive benefits for students without disabilities. Students without disabilities who have regular and frequent contact with peers who are disabled develop positive attitudes and perceptions about persons with disabilities with their nondisabled peers (Sasso & Rude, 1988).

In concordance with these findings, greater number of students with severe disabilities are being educated in public schools within their respective communities. With the increased focus in providing appropriate educational opportunities to students with severe disabilities in their local community schools comes the concern over lack of adequate staff to meet individual student needs in these schools.

DESCRIPTION OF UEID PROJECT

The Utah Elementary Integration Dissemination (UEID) Project of the University of Utah recognizes these concerns and has attempted to delineate various service patterns that are provided by teachers and related service providers in rural districts. Working with 18 rural and 3 urban teams (See Table 1), the project has been successful in supporting regular educators throughout the state in over one-third of the school districts in Utah. The UEID Project is a federally funded three year grant from the United States Department of Education, Office of Special Education and Rehabilitation Services, operating through the Department of Special Education of the University of Utah. The project’s purpose is to disseminate proven instructional planning and delivery practices, used in the education of young children with severe disabilities. UEID Project staff provided inservice training and technical assistance to professionals and parents who had students with severe intellectual and/or multiple disabilities in their neighborhood schools. Most students enrolled in the programs were classified as "severely intellectually handicapped" (i.e., IQ below 59 with significant deficits in adaptive behavior) or "severely multiply handicapped" (i.e., two or more primary handicapping conditions that interfere with total independent functioning), according to the guidelines of the Utah State Office of Education (1988b).

The project focused on the refinement and wider replication of model practices established through the Utah Elementary Integration Project (McDonnell, et al., 1991). A previously funded federal project, UEI served for three years to establish a cooperative between the
University of Utah's Department of Special Education, the Utah State Office of Education and six urban and rural school districts. This group was responsible for the development and implementation of a comprehensive service delivery model for the provision of educational services for young students with severe disabilities. Critical to this model was the establishment of practices as to facilitate the placement of students at sites within their natural school catchment areas (i.e., neighborhood school). UEI model development and implementation activities resulted in significant gains in adaptive behavior for the participating students, as well as increased in-school integration into age-appropriate regular education classes, and expanded participation in the natural social groups and networks of the school and neighborhood.

During the three year funding period of the most recent project, UEID achieved the following goals:

a) Development of a cadre of regional educational specialists, from various Utah school districts, with the expertise to design and successfully implement neighborhood school programs.
b) Delivery of comprehensive training and technical assistance for model practices, through these regional specialists, to twenty-five building/district cohorts throughout the state.
c) Dissemination of proven "best practice" model procedures to teachers, related service providers, and administrators to support the placement of students with severe disabilities in neighborhood school programs and regular homeroom classrooms.
d) Provision of training to parents and guardians so as to assist them in working collaboration with local school districts in the development and implementation of neighborhood school programs.

As Utah is a state with inherent rural needs a number of practices and model variations unique to rural school districts have been developed and field tested by the project. UEID staff and regional specialists from across the state (i.e., special education mentors from throughout the state the project has chosen, trained, and supported) have come to recognize a number of common needs for many of the rural communities as they begin to tackle school changes associated with supported inclusion. Three of these concerns will serve as the emphasis of this paper and conference presentation. They are the (a) extended job responsibilities and job duties that were not correlated with preservice training, (b) a differential service delivery pattern of teachers and related service providers, resulting in (c) the impact on the quality of education.

Table 1
Profile of Cooperating School Districts (UEID)

<table>
<thead>
<tr>
<th>District Name</th>
<th>Years with UEID Project</th>
<th>Number of Students Enrolled (K-12)</th>
<th>Community Setting(s)</th>
<th>UEID Teacher Assignment</th>
<th>Number of District Supported UEID Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duchesne</td>
<td>2</td>
<td>4,289</td>
<td>Rural</td>
<td>Full-time also serving students with mild/moderate disabilities</td>
<td>1</td>
</tr>
<tr>
<td>Garfield</td>
<td>2</td>
<td>1,100</td>
<td>Rural</td>
<td>Full-time also serving students with mild/moderate disabilities</td>
<td>1</td>
</tr>
<tr>
<td>Grand</td>
<td>2</td>
<td>1,531</td>
<td>Rural</td>
<td>Full-time</td>
<td>1</td>
</tr>
<tr>
<td>Iron</td>
<td>3</td>
<td>5,256</td>
<td>Rural</td>
<td>Itinerant</td>
<td>4</td>
</tr>
</tbody>
</table>

198

210
<table>
<thead>
<tr>
<th>District Name</th>
<th>Years with UEID Project</th>
<th>Number of Students Enrolled (K-12)</th>
<th>Community Setting(s)</th>
<th>UEID Teacher Assignment</th>
<th>Number of District Supported UEID Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kane</td>
<td>1</td>
<td>1,409</td>
<td>Rural</td>
<td>Full-time also serving students with mild/moderate disabilities</td>
<td>1</td>
</tr>
<tr>
<td>Murray</td>
<td>3</td>
<td>6,627</td>
<td>Urban</td>
<td>Full-time</td>
<td>1</td>
</tr>
<tr>
<td>Nebo</td>
<td>3</td>
<td>16,689</td>
<td>Rural</td>
<td>Full-time also serving students with mild/moderate disabilities</td>
<td>1</td>
</tr>
<tr>
<td>Ogden</td>
<td>1</td>
<td>12,478</td>
<td>Urban</td>
<td>Full-time also serving students with mild/moderate disabilities</td>
<td>1</td>
</tr>
<tr>
<td>Park City</td>
<td>3</td>
<td>2,220</td>
<td>Suburban</td>
<td>Full-time also serving students with mild/moderate disabilities</td>
<td>2</td>
</tr>
<tr>
<td>Provo</td>
<td>3</td>
<td>13,645</td>
<td>Urban/Suburban</td>
<td>Full-time</td>
<td>1</td>
</tr>
<tr>
<td>San Juan</td>
<td>2</td>
<td>3,377</td>
<td>Rural</td>
<td>Full-time</td>
<td>1</td>
</tr>
<tr>
<td>Sevier</td>
<td>3</td>
<td>4,923</td>
<td>Rural</td>
<td>Itinerant</td>
<td>3</td>
</tr>
<tr>
<td>South Sanpete</td>
<td>3</td>
<td>2,806</td>
<td>Rural</td>
<td>Itinerant/Part-time</td>
<td>3</td>
</tr>
<tr>
<td>Tooele</td>
<td>3</td>
<td>7,307</td>
<td>Rural</td>
<td>Full-time also serving students with mild/moderate disabilities</td>
<td>2</td>
</tr>
<tr>
<td>Washington</td>
<td>3</td>
<td>13,961</td>
<td>Suburban</td>
<td>Full-time</td>
<td>2</td>
</tr>
</tbody>
</table>

Service Delivery Patterns and Job Responsibilities

Many rural school districts and schools are forced to find alternate service patterns for their students. The student populations of these districts and especially the low incidence of students with significant disabilities precludes the presence of full-time certified staff hired specifically to meet their needs at each "neighborhood school". Instead these districts must look for other alternatives such as the itinerant service delivery model. Table 2 depicts the variation in service delivery patterns of special educators who were the primary case managers for students with severe disabilities in these districts. Table 3 illustrates the variation of related service delivery patterns.
Table 2
 Variation in Teacher Service Delivery
 1 - 11 students with severe disabilities in each school

<table>
<thead>
<tr>
<th>Primary Server for Students with Severe Disabilities</th>
<th>Delivery Pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time</td>
<td>One school</td>
</tr>
<tr>
<td>Full-time/Itinerant</td>
<td>Two or more schools</td>
</tr>
<tr>
<td>Part-time</td>
<td>One school</td>
</tr>
<tr>
<td>Part-time/Itinerant</td>
<td>Two or more schools</td>
</tr>
<tr>
<td>Consultant</td>
<td>Two or more schools</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Shared Responsibility for Students with Mild/Moderate and Severe Disabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time</td>
</tr>
</tbody>
</table>

Table 3
*Variation in Related Service Delivery

<table>
<thead>
<tr>
<th>Related Service Provider</th>
<th>Delivery Pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupational Therapist</td>
<td>1x/month. Consulted with special educator and local school team</td>
</tr>
<tr>
<td>Physical Therapist</td>
<td>1x/week. Worked directly with student and consulted with special educator and local school team.</td>
</tr>
<tr>
<td>Speech and Language Pathologist</td>
<td>Same as above</td>
</tr>
<tr>
<td>Hearing Specialist</td>
<td>Same as above</td>
</tr>
<tr>
<td>Vision Specialist</td>
<td>Same as above</td>
</tr>
<tr>
<td>School Psychologist</td>
<td>Consultant on as-need basis</td>
</tr>
<tr>
<td>Augmentative Communication Team</td>
<td>Consult on as-need basis; Initial evaluation and follow-up on a case-by-case basis re:referral</td>
</tr>
</tbody>
</table>

*Data gathered from one site as representative of potential service patterns in other rural areas.

Job Duties
An example of the varied responsibilities of one itinerant teacher serving four different schools in a participating rural district is outlined here. Although this example is not meant to be representative of the duties of all teachers serving students with severe disabilities in participating rural sites, it is descriptive of the types of responsibilities they may have in these schools. Some responsibilities may include but are not limited to; 1) Coordinating integration of students with severe disabilities into their neighborhood schools, 2) Coordinating and collaborating with receiving schools/teachers in providing seamless transition for students with severe disabilities to the "next environment", 3) Providing inservice/training to administrators and faculty on supporting inclusion, 4) Coordinating and
participating transdisciplinary team observation, assessment and development of negotiated Individualized Educational Plans (IEP's) for students with severe disabilities, 5) Orienting, including and supporting parents in the IEP process, 6) Collaborating with team members in providing IEP-based scheduling within the age-appropriate natural performance settings, 7) Developing quality instructional programming for students with severe disabilities, according to their needs and IEP goals, 8) Evaluating student progress by providing data-based monitoring of instructional programs, 9) Collaborating with team members in facilitating social networks and out-of-school activities for students with severe disabilities, 10) Coordinating, training, and monitoring the performance of paraprofessionals in each elementary school, 11) Coordinating transdisciplinary team meetings related to supporting the needs of the student with severe disabilities, 12) Collaborating with and providing on-going support to general educators, 13) Providing training to elementary/middle school students in advocating for students with disabilities, and 14) Providing to resource teachers as acting case manager for all students in their respective schools, observation, feedback, consultation, technical assistance and/or in-service training in each of the areas mentioned above.

Measurement System

An Implementation Review Checklist (adapted from Paine, Bellamy & Willcox, 1984, & McDonnell & McDonnell, 1988, 1991) was the instrument used to measure the educational outcomes of students with severe disabilities in participating sites. This Review Checklist (See Appendix A) was administered three times per year for each school and contained student outcomes, staff outcomes, and classroom processes.

EDUCATIONAL OUTCOMES

The educational outcomes to be addressed in this study focus on time spent in inclusive settings with nondisabled peers; quality and progress of IEP goals; quality and progress of individual instructional programs which are directly linked to IEP goals.

Other outcomes, which are expressed as management issues, include staff and student schedules which document instruction across natural settings and activities; evidence of data collection and summary for individual student programs, and teaming with classroom teachers and school based teams as denoted by team meeting agendas and regular classroom teacher contact.

The student outcomes addressing IEP goals and individual student instructional programs indicate a general upward trend across all rural sites which had ongoing review data. An upward trend was also noted across these sites in the percent of time students were spending in inclusive settings with their nondisabled peers. See Table 4 and 5 for a detailed view of these findings. This analysis included data from the first review for each site and the final review during the last year of the project.
Table 4

**INCLUSION WITH PEERS**

<table>
<thead>
<tr>
<th>Percent of time in Inclusive Settings</th>
</tr>
</thead>
<tbody>
<tr>
<td>73.83% FINAL</td>
</tr>
<tr>
<td>66.83% BASELINE</td>
</tr>
</tbody>
</table>

Table 5

**STUDENT OUTCOMES**

<table>
<thead>
<tr>
<th>Components Present</th>
<th>Baseline</th>
<th>Final</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of IEPs</td>
<td>2.33</td>
<td>3</td>
</tr>
<tr>
<td>Progress on IEP's</td>
<td>2.45</td>
<td>3.2</td>
</tr>
<tr>
<td>Quality of Instructional Programs</td>
<td>2</td>
<td>3.2</td>
</tr>
<tr>
<td>Progress on Instructional Programs</td>
<td>2.08</td>
<td>3</td>
</tr>
</tbody>
</table>

Scale 1 - 4

4 = 100%
3 = 75%
2 = 50%
1 = < 25%
The management and structural outcomes also displayed a general upward trend from baseline to final review across all participating rural sites. This trend is depicted in Table 6.

Table 6

<table>
<thead>
<tr>
<th>Components Present</th>
<th>Scale 1-4</th>
<th>1 = &lt;25%</th>
<th>2 = 50%</th>
<th>3 = 75%</th>
<th>4 = 100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaming (1x6 Weeks)</td>
<td>1.8</td>
<td>2.33</td>
<td>2.2</td>
<td>2.2</td>
<td>3.8</td>
</tr>
<tr>
<td>Teacher Contact (1xWeek)</td>
<td>4</td>
<td>3.4</td>
<td>3.4</td>
<td>2.9</td>
<td>1.8</td>
</tr>
<tr>
<td>Schedules (67 Components)</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Programs Run (80% Complete)</td>
<td>3.8</td>
<td>3.8</td>
<td>3.8</td>
<td>3.8</td>
<td>3.8</td>
</tr>
<tr>
<td>Data Summary (100% Summary)</td>
<td>3.8</td>
<td>3.8</td>
<td>3.8</td>
<td>3.8</td>
<td>3.8</td>
</tr>
<tr>
<td>Task Complete (50% Complete)</td>
<td>3.8</td>
<td>3.8</td>
<td>3.8</td>
<td>3.8</td>
<td>3.8</td>
</tr>
</tbody>
</table>
DISCUSSION

The available data seems to indicate that service delivery patterns and differential job duties of rural educational personnel did not impact on the educational outcomes of students with severe disabilities in participating sites.

While service delivery patterns of teachers and related servers may not have influenced the educational outcomes as measured in participated sites, several questions remain to be addressed. First, what are the critical variables which are associated with quality of education in rural sites for students with severe disabilities. Several studies have reinforced at least one factor which may have a more direct link to these outcomes.

Effective teaming and collaboration at the individual school level is cited by several authors as having an impact on student outcomes in rural, urban and suburban areas, in inner city and isolated farming communities (Rainforth, York, & Macdonald, 1992; Stainback & Stainback, 1990). Certainly one variable that significantly contributed to the effective teaming and collaboration across the rural elementary schools was the type and level of support received by general education staff from the special educator. In these schools, special education personnel were viewed as accessible and competent professionals, capable of providing the necessary assistance to ensure success in the classroom. This is particularly important because much of the support was provided through brief, informal, on-the-spot collaboration between the involved general-special education teacher teams (McDonnell, et al., 1991). Another form of teaming, cooperative learning and cooperative instructional groups are advocated by Johnson & Johnson, 1993 as impacting on outcomes for all students, including those with severe disabilities.

Although the evaluation data presented in this paper strongly support these findings, some limitations must be considered in their interpretation. The data were produced as part of the formative and summative evaluation of a model dissemination program, not as part of a controlled research study. For this reason, any conclusions concerning the impact of rural service delivery patterns and differential job duties educational on educational outcomes for elementary students with severe disabilities must be drawn with caution. The relatively small number of sites initially participating in the model limits generalization to the larger universe of students with severe disabilities in rural communities. A related issue is that many schools participating with the UEID Project were selected on the basis of their willingness to comply with model elements, and are not necessarily representative of other elementary schools (See McDonnell, et. al., 1991).
THE NEW CHALLENGE: A RELEVANT PROGRAM FOR THE
DISADVANTAGED GIFTED
The importance of differentiating curriculum for gifted students is well documented and established. However there is little evidence that there is differentiated programs or services for the disadvantaged gifted (Patton, Prillaman, and Van Tassel-Baska, 1990). Patton, Prillaman, and Van Tassel-Baska found that a majority of states do not differentiate programs or services for disadvantaged gifted. "If we accept the premise that disadvantaged gifted students have some characteristics and needs different from those of other gifted students then we must also accept the premise that differential programming for these students will be required in order to meet differential needs" (p. 95).

When planning and implementing programs for the disadvantaged, Renzulli (1973) states that there are two major factors to consider; 1) the characteristics of the teacher, and 2) the relevancy of the curriculum. Teachers must enjoy working with both the students and the program, and must experience a personal satisfaction with students' success and growth. "Must" characteristics of a teacher of the disadvantaged gifted students are a sense of humor, high level of knowledge of topic areas, well developed problem-solving and planning skills, high energy level and enthusiasm, authenticity and empathy, high tolerance for ambiguity and appropriate regard for discipline and control in the classroom (Colangelo & Exum, 1979). The curriculum must be relevant to the student. Renzulli (1973) defines relevant as "a set of experiences which deal with topics and issues that youngsters would talk about if given a free choice" (p. 443).

Current Programming Efforts

In an effort to address the differential needs of culturally and economically disadvantaged gifted students, The University of Texas-Pan American (UT-PA) College of Education created The New Challenge Program. The New Challenge Program is a Saturday morning enrichment program for gifted children. Students accepted for the program are identified by their school district as gifted according to The Texas Educational Agency Guidelines for the Education of the Gifted and Talented (1990). They are further identified as disadvantaged by their school districts based on qualification for free or reduced school lunches according to the United States Department of Agriculture's prescribed poverty guidelines (Texas Education Agency, 1991). Further more over 50% of the students tuition was provided by scholarships from each student's school district.

The program classes are designed to meet gifted children's educational enrichment needs beyond their everyday classroom experience. The classes: Basic and Advanced Rocketry and Aviation, Adventures in Physics, Blood and Guts, Probability and Statistics, Engineering in the Real World, The Art of Clowning Around, The Young News Reporters Club, Discovering the Art in You, The Art Experience, Rhyme, Rhythm and Reason, and Videography, meet ten Saturday mornings from 9:00-12:00. Students who apply to attend the New Challenge Program select their first, second and third choice of classes. The program coordinator assigns the students to their selected class and the students usually have their first choice for the class.

The characteristics of the teacher, as stated by Renzulli (1973), as the first of the two major factors to consider in planning a program for the disadvantaged, is addressed by interviewing and selecting teachers based on their area of expertise, enthusiasm, knowledge of nature and needs of gifted learners as well as skills in developing self-concept. In addition most of the teachers are bilingual and can converse with the students in their first language. This creates an environment that is safe and secure and conducive to learning.
Teachers employ strategies and techniques in their UT-PA New Challenge Program classes that enhance learning for disadvantaged students. Although many ideas are the same as those used to instruct advantaged gifted learners, more emphasis is placed on the use of the community and models from the community as learning guides and creative teaching strategies. For example, some teachers served as facilitators in locating with the help of the program coordinator mentors from the community for those students who had an extended interest in the class topic. This enhanced students' cultural and intellectual development above and beyond the already specialized class. In addition, each class exposes students to other types of careers other than seen in their home. Many of the teachers are professionals in the field they teach about. For example, The Young News Reporter's Club is taught by a writer on the local newspaper staff, Advanced Rocketry is taught by engineers who have completed governmental projects for space, and Statistics and Probability is taught by a female engineer.

Douglas (1969) points out that an essential element to include in programs is an earlier start toward intervention in the limitation to intellectual development and socialization. Since personal growth of the disadvantaged gifted students is nurtured by encouraging students to engage in activities that are more cooperative than competitive, teachers organized their classroom with the assistance of students to allow a lot of group and team learning. This provided students opportunities to build positive interpersonal interactions with their classmates. Because the students limited exposure to books, magazines, and the University itself, the teachers provided an enriched environment by bringing in a variety of reading materials, demonstration models, samples of finished projects, as well as speakers into their classroom.

Classes provide the learner hands-on experience by seeing and doing rather than just listening. For example, the Basic Rocketry class visited the NASA facilities in Houston and saw first-hand scientists and engineers in action. The students then built their own rockets and spent extended time after class to work independently on their project. Students helped in the planning of the trip from beginning to end which gave them an opportunity to experience the natural consequences of their planning and organization. This is learning at its best. Students gained self-esteem from having taken responsibilities and personal risks in planning this learning expedition. Because the students raised money within the New Challenge program for the Houston trip by designing and selling t-shirts, selling nutritious snacks during the 15-minute break time and talking to community members about the program for financial support, no unreasonable economic demands were expected of these students.

Teachers use concrete examples from students' experiences, from topics about which they are knowledgeable, and from areas of intrinsic interest that make the curriculum relevant. Since the student self-selected the class a desire to learn about the topic was evident. An interest inventory was given to each student to determine specific interest related to the class. Each teacher developed an interest inventory with the assistance of the coordinator specific to his/her class to find out what the student already knew about the subject and to find out what interest related to the class topic he wanted to learn more about. Every effort is made to keep the curriculum relevant to these students. Relevancy is the cornerstone of motivation which leads to a positive self-concept.

According to Loszewski-Kubilus (1992) minority students may have lower self-concepts than nonminority students and the curriculum should include a special emphasis on self-concept development. Self-concept development is emphasized by teachers in the classes where personal responses are invited, encouraged, and valued. Teachers help students set external goals for class activities in completing projects and make arrangements for those students who express an interest in working with a mentor.
Student accomplishments are shared periodically within each class as well as at the Share Fair. The Share Fair is the final day of the program in which each class displays their class activities for viewing by parents and friends. Students are excited and proud to see their projects and participate in performances. The Share Fair not only provided a "stage" for gains in self-esteem by students planning and presenting for this day's activity but creates a unity for the program.

Evaluation

An evaluation of each New Challenge Program class is conducted at the end of each ten week session. The evaluation is based on the students' perception of the program. Each student completes a 24 item questionnaire designed to elicit responses that describe the characteristics of the teacher and validate selected traits of a "relevant" curriculum. Gifted students know when their classes are fun, when their teacher requires their best effort and when their activities have real meaning for them. Students were asked to describe three things they liked best about the New Challenge program. Responses indicated 52% named their teachers, the first factor, as cited in the literature, in planning and implementing programs for the disadvantaged gifted. Students described their teachers as fun, knowledgeable, encouraging, friendly, challenging, enthusiastic and having a sense of humor. Teachers provide opportunities for independent learning and trying out new ideas. Students' success is dependent upon the teacher conveying the attitude that making errors in the search of new ideas and taking risks is an integral component of the search. The teacher cared for and sincerely liked the student, communicated with the student as a peer, and was enthusiastic and knowledgeable about the topic they taught.

A second factor essential to successful programs for the disadvantaged is the relevancy of the curriculum. A relevant curriculum for the disadvantaged gifted focuses on interests, attitude, and personal growth to enable the individual to find satisfaction in the things he does and find meaning and fulfillment in his life (Renzulli 1973; Douglas 1969; Alampre and Erlanger 1989). Students described experiences that they most enjoyed, would like to see further developed and would recommend to their friends. Of the 125 students surveyed 107 students self selected their course based on their individual interest and desire for personalized learning. 99% would recommend the class they attend to a friend. 109 of the 125 indicated that they wanted to attend the UT-PA New Challenge program again.

Students portrayed their classes as fun, exciting, and challenging, with a variety of activities and hands on experiences. Students reported an expansion in the depth of their knowledge and their technical skills empowering independent learning. They used problem solving strategies to transfer knowledge to other subjects. Engineering in the Real World, Basic and Advanced Rocketry, and Aviation, Videograpy, Blood and Guts, Adventures in Physics and Young News Reporters Club exposed gifted students to future career opportunities. Discovering the Art in You, The Art of Clowning Around, and the Art Experiences allowed the students to explore creativity.

Personal growth of the disadvantaged gifted students is nurtured by encouraging students to engage in activities that are more cooperative than competitive and providing opportunities to build positive interpersonal interactions. The students reported that they enjoyed the challenge of being with other gifted students. 106 stated they learned how to get along with others in their class and 112 learned to work better with others. Students repeatedly stated another positive attribute of the program was the opportunity to meet and interact with their intellectual peers.
Conclusion

The importance of differentiating curriculum for gifted students is well documented and established. Successful programs for disadvantaged gifted students consider characteristics of the teacher and the relevancy of the curriculum. UT-PA New Challenge program addresses these two factors by employing expert teachers and planning and implementing classes that are relevant to the students. Teachers must be enthusiastic and show concern and pride in the success of their students. Students in the Blood and Guts were enthusiastic about their teachers: "The teachers are nice and friendly and Mr. Neeley's jokes were great." The teacher is not boring, she has great abilities, is humorous, and helps me with my work was reported by students in the Probability and Statistics class. These student responses document the teacher as a major factor in a successful class.

A relevant curriculum must have real meaning for the students. Students confirmed this by responses such as "You have the opportunity to write stories and take photos," "I can tell you the program is great," "I think I will be a reporter," "It is fun doing things I like to do," "I learned how to construct and launch a rocket," "I can now apply engineering skills in marketing and production," and "I learned tips on how to create a successful manufacturing plant." The primary concern of any program for disadvantaged gifted program must be the careful selection of teachers and the diligent construction of classes that have real meaning for the student. Programs must provide appropriate inservice and staff development to insure teachers are helped to examine their attitudes and expectations concerning disadvantaged gifted. The teachers must acquire appropriate teaching strategies that continue to make the curriculum relevant for disadvantaged gifted students.

References


PARTNERS FOR TRANSITION: PREPARING STUDENTS FOR THE FUTURE

Our society holds many expectations for youth leaving school. Expectations of young adults upon entering the working world include earning a decent wage, interacting appropriately with co-workers, and advancing within an organizational structure (Chadsey-Rusch, Rusch, & O’Reilly, 1991). Youth are also expected to live as independently as possible and to develop satisfactory social and interpersonal relationships in their communities. Unfortunately, postschool outcomes for youths with disabilities in the areas of employment, independent living, and social/personal relations are discouraging (e.g., Hasazi, Gordon, & Roe, 1985; Sitlington, Frank, & Carson, 1993).

In response to these issues "transition services and plans" for youth with disabilities are now mandated by The Individuals with Disabilities Education Act (IDEA) (Public Law 101-476, 1990). In addition to defining transition services, the IDEA provides guidelines regarding when services should be provided. According to Section 602(a)(2), transition services may be provided to special education students beginning at age 14 or younger, when appropriate, but must be provided by age 16. Data regarding the number of students with disabilities who exit school without completing their educational program support the need for transition services before age 16.

With the mandate to provide transition services for students with disabilities, there is a critical need to more fully involve parents and family members in special education programs. Researchers and practitioners have argued that parents and family members are a key variable, and perhaps the key variable, in transition planning and subsequent success in adult life (Benz & Halpern, 1987; McNair & Rusch, 1991). However, parents often lack knowledge about key issues related to the education of their child, such as legal rights, an understanding of the IEP/ITP process, and an understanding of the child’s exceptionality.

The need for parent/family involvement in special education programs has been recognized at least since the enactment of P.L. 94-142, yet research over the past 15 years has indicated that parents often remain passive participants (See Turnbull & Turnbull, 1990 for discussion). Numerous barriers to parent participation have been reported in the literature. Parents often report logistical barriers, such as lack of transportation, as well as feelings of inferiority, and difficulties in communicating with school personnel. With regard to contact between teachers and parents, in a study
by Benz and Halpern (1987) "over half (57%) of the parents [surveyed] reported that contact with their child’s teacher occurred only once per term or less" (p. 509). This pattern of lack of involvement is of particular concern as more attention is focused on transition services for students with disabilities and as the role of parents and family members in this process is recognized. Today, there is agreement that schools should introduce transition planning earlier with the assistance of educators, adult service providers, employers, and most importantly, parents and family members (e.g., Lichtenstein, 1993).

**Transition Planning at the Middle School Level**

A need clearly exists to provide transition services to many students with disabilities before age 16, even students with mild disabilities. Several researchers and practitioners have argued that transition planning should be developed over time, beginning during elementary school or at least by middle school/junior high (e.g., Getzel, 1990; Sitlington, Frank, & Carson, 1993). Sitlington et al. (1993) assert "the bridge between school and adult life should be built beginning at least in the junior high school years" (p. 232). Several key elements of transition programs for students with mild disabilities have been described in the literature. Effective strategies designed to develop problem solving skills, career awareness, an interest in future planning, knowledge of how to access community resources, and family involvement are needed.

**Problem solving.** Many students with disabilities lack appropriate skills for solving daily problems. Students need exposure to real-life situations in different settings in order to effectively solve problems. According to Mithaug, Martin, and Agran (1987), "The ability to solve problems in different settings appears to be critical to postschool employment success" (p. 501).

**Career awareness.** Sitlington et al. (1993) proposed that transition planning should involve career awareness early in the student’s educational program. Fisher and Clark (1992) suggested that career awareness could easily be infused into many academic areas at the middle school level. Sitlington et al. advocate that students and parents at this level should begin to examine different career environments. In addition, students at the middle school level should begin developing their own strengths, interests, and needs so they may begin considering future outcomes involving employment.

**Future planning.** Upon graduation from high school, youth with disabilities and their parents face many difficult decisions concerning the future. Some of the issues facing students and family members involve not only employment, but also transportation, housing, financial stability, and community involvement. Miller, La Follette, and Green (1990) reported that parents felt unprepared to assume a leadership role in transition planning for their son/daughter. Based on their research, Miller et al. state that for parents "Planning for an uncertain and distant future is often not considered important, necessary, or timely" (p. 54). They further argue that
"Participation of parents in future planning must be cultivated" (p. 55).

Access to community resources. There are several resources in the community that students must learn to use effectively if they are to experience successful outcomes as adults. For example, Karge, Patton, and de la Garza (1992) stated that students need to develop transportation skills and that transition programs must address the need for recreation activities. Repeated exposure in the community to banking, retail, medical, transportation, recreational, and services offered by churches and clubs supports generalization of learned skills. In addition, students gain awareness of future career interests as they explore the various opportunities offered by the community.

Family Involvement. In a recent survey investigating transition services for youth with mild disabilities, respondents (both students and professionals) "agreed that there is a significant difference between the current level of parent involvement and the need for such involvement" (Karge, et al., p. 64). Strategies designed to increase parent/family involvement in special education programs have focused, for example, on improved communication, use of advocates in IEP conferences, and parent training and education (See Boone, 1992 for discussion). However, often these strategies have been based on traditional parent/professional interactions. When parents are assigned the role of "recipient of professionals’ decisions" they are expected to interact in a passive manner and to defer to professionals. Additionally, Turnbull and Turnbull (1990) argue that parents have preferences regarding the manner in which they receive information and these preferences should be respected.

Family Involvement in Rural Areas. Issues relative to successful transition in rural areas must be considered. "It is important to understand that school-to-adulthood activities must be planned in the context of the local community" (Wehman, 1990, p. 40). Problem areas that may impact on students’ transition from school to work in rural areas include: availability of work, adequacy of resources and finances, lack of transportation systems, securing of volunteer support, and need for personnel to assist with placements (Helge, 1984). Additionally, partnerships among schools, parents, and potential employers may not be fully developed in rural communities. With regard to family involvement in rural areas, Elliot (1988) proposed that inservice training for parents, educational personnel, administrators, and agency personnel be developed, that parent information and support groups be established, and that parents and students receive training in how to access adult service providers. Parents and families at the middle school level are the key to effective transition, especially in rural areas.

Program Background

A transition planning program at a middle school level in a rural community will be presented as an example of how key elements delineated in the literature can be combined with innovative approaches to develop family/professional partnerships. The design of this transition planning program was based on a review of the literature,
interviews with rural community leaders, and a survey investigating attitudes and opinions regarding roles and responsibilities of parents in the transition process.

The survey was administered to employers, special education teachers, transition specialists, educational administrators, and adult service providers from rural areas of Louisiana. One hundred and one individuals responded to 16 statements and 4 open ended questions concerning the roles and responsibilities of parents in the transition planning process. The results indicated that a majority of the respondents believe parents should act as case managers and advocates, assume leadership positions in parent/professional organizations, and assist their child with remediation of certain skills at home. Furthermore, a majority of the respondents recommended that parent responsibilities should include the following: provide transportation to and from the community based experience and later to and from the job site; inventory the availability of human resources through extended family and friends; collaborate with schools and adult agencies; maintain the lines of communication with all members of the transition planning team; and monitor progress of written objectives on the IEP/ITP.

Respondents expressed the view that parents should let go of their children with a disability and let them grow to adulthood. They also suggested that parents should allow their adolescent child to experience failure, and treat their child as they would an individual without a disability. Furthermore, participants proposed that parents could help their adolescent be successful in the transition process by teaching self-discipline, demanding that their child be fully integrated into the community, talking with their child about the future in realistic terms, and teaching self-advocacy.

Middle School Transition Planning Program

In Year 1 of this program efforts focused on both direct and indirect means of promoting parent/family involvement. Emphasis was placed on developing parents' awareness and knowledge, as well as, strategies for coping with issues related to transition from school to adult life.

* At the beginning of the school year the teacher initiated a series of informal letters sent to parents to convey information and invite participation in the child's educational program.
* The stage was set for the entire year with the inclusion of a logo on all correspondence designed to encourage parents to begin thinking and asking questions about their child's future.
* Parents were asked to sign and return a statement indicating their willingness to "explore the future with my child."

During the life skills instructional period, the teacher implemented a Transition Planning Unit designed to develop problem solving skills, career awareness, an interest in future planning, and knowledge of community resources. Parent involvement was actively encouraged throughout the program. Selected strategies will be presented.
Problem Solving

* **Speakers Bureau.** Individuals from various career areas were invited to present information on their particular job. Over the school year, speakers included the vice principal of the school, a policeman, a cafeteria worker, owner of a greenhouse business, and a local store owner. Each speaker described his/her job and work environment, and assigned students a "problem to solve" at home. Students were responsible for asking speakers relevant questions, for seeking parent help in solving the problem, and for sharing solutions in school the next day. Parent involvement was encouraged in the following manner: first, parents were asked to participate as speakers and/or were enlisted to locate speakers for the program; second, parents were asked to attend presentations; and third, parents were asked to help their child solve the assigned problems.

Career Awareness

* **Student project.** Each student interviewed two individuals employed in a single career area and developed a formal presentation. During the presentation the student was responsible for discussing the advantages and disadvantages of the career investigated, developing and sharing a handout/visual display, and answering questions about the career. Students were videotaped delivering their presentation.

Future Planning

* **Survey.** Students collected data from family members and friends regarding sources of employment for those individuals. This information was discussed in class and the students developed a bar graph to display their findings. Students discovered that the main sources of information on employment opportunities were family members and friends.

* **Role-play activity.** A role-play activity was developed to provide students with knowledge of appropriate clothing and behavior and practice in being interviewed. A teacher, unknown to the students, conducted the interviews. Students selected a job and had no prior knowledge of the questions that would be asked during the interview. Students were videotaped during the interview and then had an opportunity to evaluate their performance. They were provided with suggestions on how they could improve their appearance and performance in a job interview.

Accessing Community Resources

* **Community-based field trips.** The teacher identified potential job sites and community resources for the students. Field trips were planned so that students could learn more about jobs and services provided by the following:
a police station, plant nursery, fire station, post office, City Hall, building materials store, and grocery.

Final Year 1 Activities

* Choice Career Characteristics Project. First, based on previous career-related activities, students developed a list of essential work-related characteristics, interpersonal skills, and appropriate behaviors based on social/community expectations. Following this group activity, the teacher used the list in individual student conferences to identify strengths and weaknesses. The list was sent home with a letter to parents requesting that the parent circle a perceived area of weakness and star (*) a strength for their child. Additional comments were also requested. Finally, another student conference with the teacher was held during which parental input was discussed. One/two areas of weakness were selected by the student, and emphasis was placed on development of these characteristics in subsequent activities.

* Career Awareness-Education Week. During this week Army and Navy recruiters, school administrators, and vocational school representatives spoke on topics of interest related to the future for these middle school students. Students also participated in field trips to an adult education program, a vocational technical school, and the local university. Parents were notified of activities and were again prompted to consider the future of their child. They were encouraged to participate in as many activities as possible.

ASK QUESTIONS OF YOUR SON/DAUGHTER......
"Have you considered...? "What do you think about the possibility of...?

????? 5 YEARS FROM NOW....5 YEARS FROM NOW,...????
WHAT ? WHERE ? HOW?

Year 2 Program Modifications

* Speakers Bureau. Students and parents have recruited all but one of the presenters for the Speakers Bureau. Participants include a truck driver, mortician, limousine driver, auto parts clerk, bricklayer, and daycare owner.

* Community-Based Field Trips. The activities in the community have resulted in greater visibility for the students. The Garden Club invited students to maintain a garden in the center of town as a community service project. Additionally, students volunteered to bake and decorate treats for individuals receiving home health care in the community. Students have also been invited to submit articles on school activities for publication in the local newspaper.
Transition Planning Rating Scale. Parents and students individually completed this scale rating the student on items in the areas of: prevocational skills, domestic skills, community skills, recreation/leisure, social/personal skills, and self-advocacy skills. A conference was held with the teacher and similarities and differences in ratings on specific items were discussed. Behaviors were targeted for intervention and students were taught to use self-monitoring techniques, rather than rely on teachers/adults to monitor behavior and determine consequences.

Student Outcomes

1. Students have participated in Student Council, "Just Say No" drug prevention activities, sports, and science and social studies fairs.
2. Students have been observed asking questions, displaying problem solving skills, and using appropriate social skills.
3. Students have obtained a greater acceptance by school faculty and staff.
4. Students have gained more acceptance from their nondisabled peers at school.
5. Students have developed notions of good citizenship and volunteerism as a result of greater community participation.

Parent/Family Outcomes

1. Parents have acquired knowledge of their child’s capabilities and interests.
2. Parents have acquired knowledge of services available when their child exits from school.
3. Parents have developed a stronger partnership with the teacher.
4. Parent involvement has increased across the child’s education program.
5. Parents are better prepared for more formal transition planning at the secondary level. This program has helped to prepare parents to ask questions and take a more active role in making decisions regarding their child’s educational program and future.

Conclusion

Specific strategies are needed that encourage parent/family involvement in transition planning. The level or extent of this involvement appears to be critical to the success of a student’s program. McNair and Rusch (1991) suggested that it is "the responsibility of the transition team to seek out parents and offer a range of involvement opportunities from which they can choose, acting with the assumption that parents generally do desire involvement" (p. 99). Programs such as the one described demonstrate the importance of initiating transition activities at the middle school level. Strategies for increasing parent involvement are infused throughout the program and allow parents and family members to choose the level of involvement desired. Parent and family involvement is essential for effective transition planning, especially in rural areas.
REFERENCES


PREPARING SPECIAL EDUCATORS FOR WORK IN RURAL AREAS: TWO FIELD-BASED PROGRAMS THAT WORK

The need for programs designed to prepare special education teachers for service in rural and remote areas is great. This need was first brought to the attention of the educational establishment by Helge (1984). She described the many obstacles inhibiting teachers trained in urban areas from delivering high quality services to children residing in rural locations and called for the development of programs specifically designed to prepare educators for rural work. The Office of Special Education and Rehabilitation Services responded to this need by sponsoring a number of competitions under the Personnel Preparation Program. These programs were successful in preparing large numbers of teachers with specific skills and knowledge to work in rural America. At present, special consideration is still given to some personnel preparation proposals which have a rural focus. Some rural locations, however, are so unique that recruitment and retention of qualified teachers remains problematic. One of these areas is the sprawling and extremely remote Navajo Indian reservation.

The Navajo Nation is vast. The reservation is in four states—Arizona, Colorado, New Mexico, and Utah. Interestingly, another entire Indian reservation (the Hopi Nation) is completely surrounded by Navajo land. Navajo people have their own language, their own customs, and their own laws. Some individuals have suggested that being on the Navajo reservation is as close as one can come to being in a foreign country—without leaving the United States. Travel and communication problems on the Navajo reservation are legendary. Distances between people and services are very great and merely traveling from one place to another, irrespective of distances, can be an adventure. Roads are often poorly maintained and sometimes are washed away by inclement weather. Phone communication may or may not be in service and some small villages are not served by phone lines at all.

Given these issues, it is not surprising that special education teacher recruitment and retention are problems. Teachers unprepared for the realities of life on the "big res" as the Navajo Nation is sometimes referred to are often confronted by incredible professional and personal problems. These problems sometimes include severe professional isolation, professional stress, and a variety of personal stressors such as anxiety and health problems. In a study of the retention of special class teachers on the Navajo reservation, Lancaster (1992) found that "teachers were almost totally unprepared for their work and often left their jobs before fulfilling their first contract" (p. 78). Clearly, special preparation programs for those who plan to work on the Navajo reservation are required. In 1991, several special education faculty at Northern Arizona University met with representatives from schools on the Navajo reservation to discuss personnel matters and to attempt to design one or more programs to prepare teachers for work on the Navajo Nation. Several factors were identified as being critical in the development of a successful teacher preparation program. First, it was decided that the preparation program should be site-
based. Students needed to live on the reservation and be immersed in the culture. Second, the ideal program should involve both local participants (ideally, Native American people) as well as interested students from off the reservation. The thinking was that local participants may be inclined to remain in the area after they had completed their training. However, there was also widespread agreement that too few local persons would be interested in participating in the program to meet the needs of the local schools. Additional persons would have to be prepared if all children and their families were to receive quality service. Finally, it was agreed that participants in such a program would have to be very carefully selected and nurtured. Some teachers left the reservation before their trucks were unpacked. Clearly, we did not want this same thing to happen to teachers being prepared for work on the Navajo Nation. The result of these discussions was a proposal submitted by Northern Arizona University to the United States Department of Education (USDOE). The proposal, titled The Rural Special Education Project (RSEP), was designed to prepare special education teachers to deliver quality services to Navajo children with handicapping conditions. This $360,000 grant was funded by the USDOE. The authors of the proposal were three professors of special education at Northern Arizona University—Dr. Susan Miller, Dr. Sam Minner, and Dr. Patricia Peterson. Dr. Susan Miller is the Principal Investigator of the RSEP. The RSEP was so successful that another personnel preparation proposal was submitted by the special education faculty at NAU. The proposal, called the Rural Multicultural Training Collaborative (RMTC) is similar in many ways to the RSEP. This project was also written by Drs. Miller, Minner, and Peterson. It was funded in 1993 for $410,000 and is managed by Dr. Patricia Peterson. Both projects are described in this paper.

The Rural Special Education Project

The Rural Special Education Project is a partnership between Northern Arizona University and the Kayenta Unified School District in Kayenta, Arizona. Kayenta is a small town located on the Navajo Reservation. There is one fast-food restaurant, one grocery store, a post office, several gas stations, and one trading post in Kayenta. There is a small hospital operated by Indian Health Services (IHS). There are no banks or movie theatres there. Though quite small, Kayenta is a popular destination for American and foreign tourists due to its proximity to Monument Valley, an incredibly scenic natural area in southern Utah. Many films have been shot in the Monument Valley area and outdoor enthusiasts continue to camp, hike, and photograph the area.

There are two school systems in Kayenta. A small boarding school is operated by the Bureau of Indian Affairs. A public primary, intermediate, middle, and high school are operated by KUSD. Approximately 89% of all KUSD students are Native American, mostly Navajo and Hopi. The KUSD has modern facilities including an indoor Olympic size pool, several grass playing fields, and a Navajo Cultural Center where students, faculty, and individuals from the community gather to practice Navajo crafts and enroll in informal classes and seminars. The Journal of Navajo Education is published at the Navajo Cultural Center. Northland Pioneer College, a community college serving much of the Navajo reservation, has some facilities on the KUSD campus. The KUSD also owns several large housing compounds ranging from modern townhomes to efficiency apartments.

Eighteen students were selected for the RSEP for the 1992-1993 academic year. The application process entailed three steps—submission of (1) an application detailing each applicant's GPA, background working, living or traveling in highly diverse areas, and other demographic information, (2) a paper explaining why the applicant wanted to participate in the project, and (3) a personal interview. A panel of faculty members selected the students primarily based upon their academic qualities and their motivational level for
Nine Navajo persons, one H\textsuperscript{\text{\textregistered}}i person, and eight Anglo persons were selected. All but one of the participants were female. All Native American participants were employed by KUSD as teacher aides. After being selected for the project, all participants completed two orientation activities. The first was conducted on the campus of NAU. This two day orientation was conducted by a Native American faculty member and other NAU faculty and staff who had worked on the Navajo reservation. This orientation consisted of an overview of the reservation, an orientation to the varying types of schools on the reservation (e.g., BIA schools, public schools, tribal schools, etc.), an orientation to Navajo customs and culture, and a discussion concerning the advantages and disadvantages of working on the Navajo Nation. Immediately after the on-campus orientation, all participants took part in an orientation planned and managed by KUSD. This orientation consisted of basic information about the school system (e.g., administrative plan, who to call for help, etc.), an overview of the demographics of the student body, and a tour of the physical facilities. The orientation ended with a bus ride to a mesa and fry-bread dinner. After this second orientation was over, the RSEP participants moved to Kayenta where they would live for the entire 1992-1993 academic year.

The Anglo students resided in apartments owned by KUSD. These apartments were adjacent to the KUSD primary school. Each student had a private bedroom furnished with a bed, a desk, a nightstand, and a lamp (all of which came from the NAU Department of Surplus Property). Students shared bathroom, kitchen, and living room facilities. As a contribution to the project, KUSD donated these apartments and the utilities servicing them. The Native American participants resided in their homes in or near Kayenta.

All RSEP participants followed a similar daily schedule. Each Monday through Friday, the Anglo participants were required to work four hours each morning in a KUSD classroom. The KUSD employed a full-inclusion model of service delivery so participants were placed in regular classrooms. All classrooms enrolled one or more handicapped children. During these twenty hours (four hours per day x five days per week), RSEP participants assisted teachers and planned and implemented their own lessons. Their work was supervised by a Project Manager, an NAU faculty member who lived in Kayenta for the entire academic year. Like the RSEP students, this individual resided in an apartment donated by KUSD. The Project Manager was assisted by a doctoral level graduate assistant. Other NAU special education faculty members also assisted with the supervisory responsibilities. The Native American RSEP participants were permitted by KUSD to retain their teacher aide jobs in the mornings. The KUSD continued to pay them for their work. Each afternoon, Monday through Thursday, all RSEP participants attended their teacher preparation classes. Classes were held in a modern classroom which had been made available to the project by KUSD. Classes met from three-four hours per day and followed a well established schedule. Each class started with a brief Navajo language lesson. The Navajo participants functioned as teachers and tutors to the non-Navajo speaking students. Navajo words and phrases were placed on cards and used in conversation. Students charted the number of words and phrases they knew. Next, the daily lesson was presented. These lessons were primarily taught by the RSEP Project Manager though the graduate assistant and faculty from the NAU campus frequently drove to Kayenta for guest lectures. During the fall term, students took classes pertaining to characteristics of handicapping conditions, assessment and evaluation of learning, and behavior management. During the spring term, students took classes in methods of teaching, parental collaboration, and issues in rural special education. In all cases, whatever topic was being discussed was related to the realities RSEP students faced in their classrooms. These "praxis sessions" sometimes took quite a bit of class time. For example, when methods of identifying handicapped children were discussed in class, RSEP students pointed out the inconsistencies between what was being taught and what they had observed in schools. This led into a discussion of non-biased identification approaches, how difficult it was to
accurately identify some minority children, and the variability between state and federal regulations and actual school practices. Many RSEP students agreed that these sessions were the most valuable in their preparation programs.

A variety of support services were made available to RSEP students. Most notably, we employed a cross-cultural counselor to work with students on an individual basis and in small groups. We anticipated that students would experience a variety of professional and personal stressors. Professionally, we felt that students could feel isolated and quite overburdened. The workload associated with being in the KUSD schools twenty hours per week plus attending their NAU classes Monday through Thursday was considerable. We also felt that some students could experience problems interacting with others in their apartments. Students' reactions to discrimination were also thought to be a source of possible stress. The cross-cultural counselor visited Kayenta once per month. She met with each student and typically met with the group of students residing in each apartment. She also provided students with her private phone number and encouraged them to call her if they desired to do so. Finally, each RSEP student was required to maintain a journal. Students were asked to make daily entries, particularly about their reactions to the culture they were experiencing and to their work in KUSD classrooms. Students were told that the journals would be read by the cross-cultural counselor, the Principal Investigator of RSEP, and others designated by the Principal Investigator.

We wanted to insure that all RSEP students fully experienced Navajo culture. We knew of many non-Navajo people who lived on the reservation for many years and never visited the home of a Navajo person, never attended a Navajo ceremony, and never learned about traditional Navajo beliefs and values. To mitigate against this, we asked the Navajo RSEP participants to function as cultural advisors to the non-Navajo participants. These advisors were paid a nominal sum to host students to at least one social event per month (e.g., a family meal, attendance at a lecture or seminar pertaining to Navajo culture, etc.). We also planned several excursions which we hoped would further enrich our students' understanding of Native American culture. The most unique of these excursions was a visit to Supai village, a very small village populated almost exclusively by members of the Havasupai tribe. The Havasupai reservation is located at the very bottom of the western side of the Grand Canyon. It is only accessible by an eight mile (one way) hike, horse, or helicopter. All of the RSEP students made the hike to Supai. There they visited the school, heard a lecture about the history of the tribe, and visited the scenic falls emptying into the Colorado river. The cultural activities RSEP students engaged in Kayenta were many and varied. Students attended a Kachina race, a Navajo puberty ceremony, and a Navajo wedding ceremony. Students attended the Western Navajo Nation fair, hiked throughout Monument Valley, and visited Canyon de Chelley. Some students herded and sheared sheep and made mutton stew and frybread.

We also encouraged RSEP students to engage in several professional enrichment activities. All students attended and presented papers at the Arizona State Council on Exceptional Children conference in Phoenix, Arizona. Students also attended and delivered presentations at the NAU Honors Week conference.

The Rural Multicultural Training Collaborative

The responses we had from students, our colleagues on the Navajo reservation, and others to RSEP was so positive that we submitted another personnel preparation proposal to the USDOE. Essentially, we took what we learned from RSEP and built upon the strengths of the project to design another program which we called the Rural Multicultural Training Collaborative (RMTC). The purpose of the RMTC is identical to the RSEP (to prepare teachers to deliver quality services to Navajo children). However, the RMTC also
prepares teachers to work in Hispanic communities. The authors of this $400,000 project are Drs. Susan Miller, Sam Minner, and Patricia Peterson. Dr. Peterson is the Principal Investigator. The RMTC is a partnership between Northern Arizona University, Greyhills High School in Tuba City, Arizona, and several school districts in extreme southwestern Arizona. The RMTC began in 1993 and will be in operation at least until 1997.

Like the RSEP, traditional students and teacher aides participate in the RMTC. During the fall term, six traditional (Anglo) students worked at Greyhills High School in Tuba City, Arizona for twenty hours per week. Greyhills High School is located on the Navajo Nation in a small town called Tuba City. Tuba City is about seventy-five miles from Flagstaff and is a commercial and cultural center. The traditional students resided in apartments owned by Greyhills High School. As was the case in Kayenta, these apartments were donated to the project at no cost. Nine Navajo teacher aides also participated in the first year of the RMTC. These persons continued to work at their teacher aide jobs each morning. All RMTC participants attended their NAU classes in the afternoons (Monday through Thursday). Like the RSEP, we employed an on-site Project Manager for the RMTC. This person taught most of the classes in the project and supervised the students' work in the Greyhills classrooms. A cross-cultural counselor was also employed in this project. However, the RMTC differs from the RSEP in one important respect. The RMTC participants are provided with special training pertaining to Hispanic students. At mid-term, the Anglo (hereafter referred to as traditional) RMTC students go as a group to Cuernavaca, Mexico to participate in the NAU Spanish Immersion Program. There, the students gain approximately one semester worth of training in Spanish over a three week period. Students live with Mexican families, attend classes, and complete a daily excursion into a local community to practice their new language skills. After this experience, they travel to Yuma, Arizona where they are placed in schools near the border. Again, students work twenty hours per week in the schools and complete a full complement of NAU classes in the afternoons. The traditional NAU students are joined in Yuma by a contingent of Hispanic teacher aides. These persons continue to hold their teacher aide jobs while completing work toward their degrees in special education. The traditional RMTC students complete their full program in consecutive terms while the Navajo participants complete their programs over two fall terms and the Hispanic participants complete their programs over two spring terms. Another unique attribute of the RMTC pertains to the way courses are delivered to students during the spring term. Though the RMTC Project Manager goes to Yuma with the students and continues to deliver some instruction, some classes are delivered over instructional television. Northern Arizona University operates a two-way microwave link between Yuma and the home campus. This state of the art system provides real time interaction between the sites.

Evaluation of Programs

A comprehensive evaluation of the RSEP was conducted at the end of the first year of the project. Mr. Kevin Brown, a doctoral student at NAU, completed a qualitative analysis of the project focusing on the reactions of students to the cultural experiences they had while in Kayenta. Mr. Brown found that students spent between 645 and 900 hours of time in actual classrooms. Participants engaged in between 18 and 68 cultural activities. An analysis of students' journals revealed that three major themes evolved from journal entries--professional reflections, personal reflections, and cultural impact reflections. Seven-hundred thirty eight comments were made under the professional reflection rubric. Further analysis revealed that two sub-grouping could be subsumed under this rubric--professional reality testing and professional confidence building. Comments made under the professional reality testing sub-rubric pertained to professional activities which appeared to be inconsistent with concepts learned in NAU classes. One participant suggested:
"Full-inclusion is not working. We learned that this was a good and innovative idea in class, but the reality of what goes on in real classrooms is very bad."

Nine-hundred seven comments were made under the personal reflection rubric. These comments pertained to how participants reacted to their lives in the Kayenta apartments and their personal interactions with their fellow students. Most of these comments (n=289) were of a positive valence. One student stated:

"I can't believe that we're out of here in less than a month. I have become very close to everyone here. We've gone through so much together. I know I will miss everybody terribly."

Two-hundred thirty comments were made by students about cultural matters. Most all of these comments were positive. Thirty-eight of them, however, were not. One student stated:

"The Navajo people talk about their connection to the earth, but they throw their trash everywhere. This place is a mess. I don't think they are connected to the earth at all."

We are presently conducting an evaluation of the RMTC, but preliminary data looks positive. Teachers, students, and administrators affiliated with the project have commented upon the wonderful cultural and professional experiences our students appear to be receiving.

Conclusions

Preparing well qualified special education teachers for service in rural and remote areas is a difficult job. Preparing such teachers for service to American Indian children is an even more difficult thing to do. We are convinced that the best way to do this is to provide students with the opportunity to live and work in the very settings we hope they will be in after graduation. Students in these settings need much support and such programs are not without risks. However, we feel that the RSEP and the RMTC are good models of personnel preparation for special education teachers. We hope to revise these programs, perhaps expand them, and continue them well into the next century.
References


DEVELOPING MEDICAL AND EDUCATIONAL PARTNERSHIPS IN SCHOOL SETTINGS TO MEET HEALTH-RELATED AND EDUCATIONAL NEEDS OF STUDENTS WHO ARE MEDICALLY FRAGILE: HOW CAN RURAL SCHOOLS CATCH THAT ELUSIVE RAINBOW?

The population of children with physical disabilities who are attending schools across the country is experiencing an unprecedented evolution. The needs of children with physical and health disabilities changed gradually in the initial years following passage of P. L. 94-142, the Education for All Handicapped Children Act of 1975. However, in the past decade the incidence of these children in the general population and the complexity of their needs have shifted dramatically (Hobbs, Perrin, & Ireys, 1985; Ireys, 1988; Lehr, 1990; Sirvis, 1988; Urbano, 1992; Office of Technology Assessment, 1987). This has resulted in a unique population of children who require the type and scope of services for which school systems had not previously been expected to anticipate, plan, or provide.

School systems have the challenge of completing the rainbow of hope that medical and rehabilitation technology have ushered in for children with special health needs. Progressive medical interventions have enabled children to survive medical crises that only a few years ago would have resulted in death (Parette, Hourcade, & Brimberry, 1990). Rapid development of innovative rehabilitation technologies has also occurred, enabling more children who are medically fragile and who remain dependent on medical technology to move from hospitals and nursing homes to home-bound care, and more recently to public school settings (Lehr & McDaid, 1993).

**Definition of population.** The Council for Exceptional Children (CEC) (1988) defined children who are medically fragile as children who “require specialized technological health care procedures for life support and/or health support during the school day” (p. 1). The Office of Technology Assessment (1987) defined a child who is dependent on technology as “one who needs both a medical device to compensate for the loss of a vital body function and substantial and ongoing nursing care to avert death or further disability” (p. 3). Members of the Task Force on Technology Dependent Children (1988) clarified the concept of children who are technologically dependent for the consideration of school personnel by stating that a child who is technologically dependent is “a person from birth through 21 years of age; who has a chronic disability; requires routine use of a specific medical device to compensate for the loss of use of a life sustaining body function; and requires daily, ongoing care or monitoring by trained personnel” (p. vii-1). Although these definitions tend to suggest the nature of the health and educational needs which might exist, they fail to encompass all the unique medical conditions and educational needs of these students (Sirvis, 1988).

**Inclusion of Students Who Are Medically Fragile In School Systems**

Participation in the public schools by children who are medically fragile and technology dependent is supported by existing federal legislation. Section 504 of the Rehabilitation Act of 1973 prohibits discrimination against persons with disabilities who receive services in public school settings, and mandates the opportunity to participate in federally funded programs. P. L. 101-336, the
Americans with Disabilities Act of 1990 (ADA), extended the Section 504 protection against discrimination to private and public entities. P. L. 101-476, the Individuals with Disabilities Education Act of 1990 (IDEA) ensures the right for all children to receive a free and appropriate public education. Despite these legal mandates and a shift in popular opinion regarding the inclusion of individuals with disabilities in society, practical and successful inclusion of this population of children in school settings will be difficult to achieve. School personnel are challenged to anticipate and provide for the full scope of needs of children who are medically fragile and who remain dependent on medical technology while they are in school settings. Inclusion in safe school environments that facilitate effective learning will require careful planning by a coalition of educational and medical personnel. Careful planning and the provision of appropriate learning opportunities for these children will, in turn, prepare children to become full participating members of society as adults.

The numbers of children who have complex health needs in school settings are increasing concurrently with adjustments being made by school systems in response to powerful philosophical and legal forces. Acceptance of the concept and practice of inclusion is growing in momentum (O'Brien, Snow, Forrest, & Hasbury, 1989; Stainback & Stainback, 1990). The literature is burgeoning with controversy regarding the definition of inclusion, the scope of services that should be involved in inclusionary school settings, and the appropriateness of all children being included in general education settings (see e.g., Fuchs & Fuchs, 1994). Interestingly, the literature appears to suggest that practitioners are developing inclusionary programs based on a philosophical rather than an empirical foundation. Children who are medically fragile and who remain dependent on medical technology are a new challenge to traditional general and special education programs. These children are particularly vulnerable to the newly emerging, underdeveloped inclusionary programs (Caldwell & Sirvis, 1991; Lehr, 1990a, 1990b; Viadro, 1987) which fail to consider or plan for the health-related needs of these children. Most of the literature on inclusion consistently addresses curriculum and social issues while totally dismissing considerations for children who have complex medical needs.

Opponents of inclusion have expressed concern about the dilution of special services to all children with disabilities in inclusionary settings. However, with collaborative planning by partnerships forged across medical and educational disciplines, viable means can be developed for professionals to safely and effectively meet the needs of students who are medically fragile and who remain dependent on medical technology while they are in school settings. School programs that safely and effectively include these children must be planned, developed, and implemented with the full, active collaborative participation of nursing professionals, allied health personnel, physicians, and personnel from both special and regular education. Additionally, plans for an adequate number of personnel as well as appropriate training of all personnel at each level within the educational system must be provided and continuously updated to ensure the ongoing safety of this population of children while in school settings.

Scope of Services in School Settings Needed by Children Who Are Medically Fragile

What is the scope of the services that children with special health care needs require? The Office of Technology Assessment (1987) divided the population of technology-dependent children into four subgroups. These categories provide an excellent overview of the scope of the needs of these children. Criteria for each subgroup were based on medical technology frequently needed by children with complex medical needs and include: (a) Group I children who require ventilator assistance; (b) Group II children who require parenteral nutrition and/or prolonged intravenous drugs; (c) Group III children who require other more complex device-based respiratory or nutrition support; and (d) Group IV children who require apnea monitoring, renal dialysis, and/or other device-associated nursing.

The Joint Task Force for the Management of Children with Special Health Needs of the American Federation of Teachers (AFT), The Council for Exceptional Children (CEC), National Association of School Nurses, Inc., (NASN), and National Education Association (NEA) (1990)
identified 10 categories of procedures that are typically needed by children who are medically fragile. These categories include specialized health care procedures involved in (a) activities of daily living, (b) catheterization, (c) medical support systems, (d) medications, (e) ostomies, (f) respiratory assistance, (g) screenings, (h) specimen collection/testing, (i) other health care procedures, and (j) development of protocols. Various personnel have been identified to perform these specific procedures based on specialization of training and skill level required for their performance. Personnel include the physician, registered nurse, licensed practical nurse, certified teaching personnel, nutritionist, occupational therapist, physical therapist, speech/language pathologist, teacher aides, health aides, uncertified teaching personnel, secretaries, bus drivers, cafeteria workers, and custodians (Joint Task Force for the Management of Children with Special Health Needs, 1990).

**Current Modes of Service Delivery In School Systems for Children Who Are Medically Fragile**

Guidelines for roles and responsibilities for professionals to provide for the safe delivery of specialized health care to children who are medically fragile in school settings have only recently been identified (cf. Caldwell, Todaro, & Gates, 1989; California State Department of Education, 1990; Haynie, Porter, & Palfrey, 1989; Joint Task Force for the Management of Children with Special Health Needs, 1990; Pennsylvania Department of Health, 1983; Viele, 1988). Despite these recent efforts to develop guidelines, school systems are unprepared for the arrival of these children in educational settings. Few educators have the requisite experience and training in the types of health care procedures required for inclusion of children who are medically fragile and who are technologically dependent (Lehr & McDaid, 1993). This presents a very serious ethical dilemma for educators. As noted by Nemeth (1993/94), "Teachers and paraprofessionals nation-wide are saying that, without formal training, often without supervision or specific information, they are being asked to make medical decisions and perform medical procedures on children with severe handicapping conditions" (p. 9). Protocols and policies which clearly establish the roles and responsibilities of personnel within the child’s educational setting are typically nonexistent. Such problems, compounded with the lack of appropriate personnel training and direct experience, places school systems and students who are medically fragile and reliant on medical technology in a very precarious position (Holder-Brown, 1994).

School systems are currently attempting to address the unique needs posed by this special population of children; however, without universal policies, attempted solutions vary significantly across time, sites within each state, and across the nation. For example, Nemeth (1993/94) describes a city school system in the northwest initially was providing incentives for paraprofessionals to volunteer to receive further training to perform medical services. This practice reflects a trend toward expanding services by delegating roles, sometimes highly technical, upon paraprofessionals. Recently this same school system has developed a more expansive policy that “...determines who will be trained for what procedures ...” (Nemeth, 1993/94, p.9). Their new policy states that doctors will provide written authorization for specific procedures; and additional "medical" training will be provided for teachers. Despite their acknowledgment of the need for more intensive health-related care for these children while in school settings, the role of the school health nurse was not developed to encompass meeting the needs of these children beyond providing the written Health Care Plan. Nemeth (1993/94) also describes a school district in Michigan that has specified that school nurses make all nursing judgments and decide which duties, if any, can be delegated. A southern state has addressed the issue by mandating a specific number of training hours required for paraprofessionals and for teachers before they can perform "medical" procedures. Teachers from a school system in a major northeastern city reported that they are "...performing medical procedures, but many would rather not...teachers, secretaries, paraprofessionals, and bus drivers should not be required to perform medical procedures.” (Nemeth, 1994, p. 9).

**Issues**

Differences in philosophy, policy, and approaches within states and across the nation focus
attention on three major issues relating to serving children with special health-related needs in educational settings. The first issue is the need for a national consensus regarding which professionals and/or paraprofessionals should be implementing specific procedures. The second issue is the need for specific training and/or certification requirements designed to ensure safe delivery of health-related services to children who are medically fragile and who remain dependent on medical technology while in educational settings. Such certification requirements would be unique for each level of employee working within school settings. The third issue focuses on the need for the medical and educational community to collaboratively plan, develop, implement, and evaluate a comprehensive program for the safe, effective transition of children from the hospital to the school setting as well as the ongoing safe, effective inclusion of the child in his or her community school.

One possible solution that will enable the medical and educational community to successfully collaborate could be accomplished by involving more expansive use of school health nurses. Generally, school health nurses continue to provide traditional school health nursing services such as health education, first aid, screening, accident prevention, and environmental management. Frequently school systems do not have nurses on staff, or they will have one nurse who provides services for an entire school district. The use of the mutual health-related training of the nurse in the medical setting and the school nurse provides a natural bridge between the two service sectors. This partnership can be the effective connection needed to bridge the current gap between the medical environment and the educational environment. The resulting linkage is the key to the development of a medico-educational team that can ensure the success of the child's ultimate rehabilitation and maximum inclusion in society.

The Medico-Educational Team Development and Process

When the child's maximum medical recovery and physical rehabilitation has occurred in the medical setting, a shift in emphasis on service delivery begins. Rather than focusing on services provided in the hospital, attention is directed toward service delivery in the child's community. A collaborative, multidisciplinary medical team consisting of the parents, physician, nurse/health care coordinator, and appropriate allied health personnel (e.g., physical therapist, occupational therapist, speech therapist, and/or social worker) jointly review and discuss the child's health records, physician's orders for health-related procedures and equipment, and how the resulting needs can be met in the child's home, community, and school.

After this formal multidisciplinary team meeting, and before the child's hospital discharge, the nurse/health care coordinator must directly contact the school health nurse to provide information regarding the child's status and health-related needs that will continue to be required while the child is in school. This step is imperative to ensure appropriate maintenance of health-related procedures during the transition from the hospital to the school setting. The nurse/health care coordinator should make the initial contact with the school health nurse by telephone and follow up immediately with a letter, copy of physician's orders, and discharge plan.

Once the information has been received by the school health nurse, the nurse/health care coordinator again contacts the school health nurse by telephone to determine how the child's needs can be met within the educational setting. The nurses from the two settings collaboratively determine the need and availability of personnel, equipment, and accessibility within the school. The numbers and types of personnel, and the training they need; equipment availability; and accessibility provisions must be carefully planned to ensure that the child's health-related needs are met safely and effectively within the school setting.

The medico-educational team. This team consists of the physician, parent, the nurse/health care coordinator from the hospital, the school nurse, school counselor, and related service personnel and allied health personnel (e.g., physical therapists, occupational therapists, social worker). The team collaboratively makes determinations based on shared information gained from the medical records,
school records, concerns of the parents and child, as well as identified resources and needs of the school. A home visit may be of value, but may not always be realistic. All team members may not be able to participate and some parents may not desire a home visit from a team member. Alternatives for the first medico-educational team meeting must be flexible.

The minimum medico-educational team participants for the initial transition meeting should include the nurse/health care coordinator for the hospital or rehabilitation center, the school health nurse, the parent, and, if appropriate, the child. A meeting involving these three key people is imperative to ensure the effective bridging of the medical and educational communities.

Options for the initial meeting of the medico-educational team include the (a) hospital; (b) school; (c) child's home; or (d) a geographic site between the hospital and school when long distances are involved. An alternative to a physical meeting site could be a three-way telephone conference. During this meeting the participants will determine the family's and the medico-educational team's resources for providing health-related needs to the child during the daily transition between the home and the school setting. The team members must collaboratively address needs for training, equipment, and accessibility for home, community, and school to safely and effectively provide for child's health-related needs within each setting as it relates to the child's educational development. It is important that the findings be recorded by the nurse/health care coordinator and be sent to all members of the medico-educational team. Also, this report can become part of the school nurse's assessment and must be used as a foundation for the child's Health Care Plan; thus, it should become a permanent part of the child's school records.

It is imperative that the medico-educational team collaboratively determine what is needed to ensure the safe and effective participation of the child in school from the time the child departs for school until he or she returns home. Transportation, transition from the bus to the classroom, classroom involvement, transitions within school, access to the cafeteria, and participation in physical education must all be considered. Within each of these settings, a range of factors must be jointly identified and provided: (a) specific services needed by the child, (b) personnel requirements, (c) training needs of personnel, (d) equipment needs, (e) potential problems or emergencies, (f) emergency plans, and (g) back-up plans for absent staff.

When the medico-educational team determines and agrees upon needs in each of these areas, objectives for each participant must be established to ensure that resources are available to provide the child with a safe environment that enables him or her to learn effectively. For example, objectives may be included for (a) the local and state education agencies; (b) community agencies; (c) school personnel such as the school nurse, school counselor, physical therapist, occupational therapist, teacher, aides, bus driver, and cafeteria personnel; (d) medical personnel such as the physician, occupational therapist, and the nurse/health coordinator; (e) the parent; and (f) the child. Objectives should be based on the resources accessible to and competencies demonstrated by each participant. Pooling skills and talents across all participants and sharing information and expertise with targeted personnel requiring assistance is the key to facilitating a successful transition for the child from the medical to the educational setting.

Service Delivery in Rural Settings for Students Who Are Medically Fragile

Personnel within rural communities frequently feel that they are not able to maintain comprehensive service delivery in either their medical or educational environments. School administrators and teachers in rural areas may feel particularly vulnerable and inadequate due to the inability of their community and school to meet some of the complex, high-tech, health-related needs exhibited by children who are medically fragile and who remain dependent on medical technology. Success in rural education settings in providing the appropriate care to these children can be accomplished through the following preparations:
1. Medical teams at major hospitals and rehabilitation centers should be developed. These teams must accept the responsibility for developing and implementing comprehensive transition plans for children which consider transitions from hospital and rehabilitation settings to community schools.

2. Educational teams must be developed within all school systems that have the capability of establishing linkages with medical teams. Use of school health nurses as liaisons between educational personnel and hospitals is critical.

3. Medical teams and educational teams must be willing to provide feedback to one another regarding the child's health-related needs, resources, and training requirements. Information exchange is imperative if safe, inclusive environments that are conducive to optimum learning are to be maintained for children who are medically fragile.

If these basic tenets are not in place within a community and state, it is suggested that a statewide coalition for students who are medically fragile be initiated. Provision of comprehensive services in predominantly rural areas depends upon cooperative relationships between agencies and individuals within the community, as well as networking between communities. Successful service delivery is contingent upon knowledge of existing resources and developing innovative approaches to accessing these resources when situations arise that demand services that are not available in traditional and direct ways. Development of these resources requires a general awareness by all agencies throughout the community and across the state regarding the need to share information and resources about children who are medically fragile and who remain dependent on medical technology while in a school setting.

A model coalition. The Coalition for Students Who Are Medically Fragile and Technologically Dependent was initiated in April, 1993, to address the needs of students with special health needs in schools across Alabama. The primary concern of the Coalition was the increasing number and complexity of needs exhibited by these children at a time when resources in educational settings were being diverted from special care populations. The founders of the coalition were also concerned about the rural nature of the state in which most school systems had extremely limited resources. Potential participants in the coalition were contacted from a variety of disciplines, settings, and communities. They included parents, educators, nurses, physicians, physical therapists, occupational therapists, speech pathologists, social workers, school counselors, special education coordinators, case managers, hospital discharge planners, child life directors, school superintendents, principals, and legal advocates.

The Coalition employed a broad, multidisciplinary perspective to reach a consensus regarding (a) the population of children currently served within medical and educational environments, (b) the future population requiring services based on medical trends, and (c) a vision statement. The Coalition collaboratively developed a series of purpose statements which would guide the work of the group regarding service delivery to students who are medically fragile and/or technologically dependent while they are in educational settings. The following purposes have been identified: (a) gain clarification of professional roles and responsibilities in educational settings; (b) ensure appropriate training for families, caregivers and all educational personnel involved in the child's educational process; (c) develop recommendations regarding guidelines for state-wide implementation to meet health-related and educational needs of these students; (d) develop grass-roots lobbying of legislators to gain funding for personnel preparation programs, inservice and community-based training and provision of appropriate direct services; (e) develop and provide educational awareness to the general public; (f) ensure that the State Department of Education requires teachers who work with students who are medically fragile and technologically dependent to be certified in Orthopedic and Other Health Impairments; and (g) ensure that Alabama has at least one graduate level personnel training program to certify teachers in Orthopedic and Other Health Impairments.

Each of the purpose statements was assigned to a working committee charged with the responsibility of developing appropriate goals and objectives. The professional roles and
responsibilities have been studied from the perspective of the needs of different communities across Alabama, as well as from information from the literature that implied best practice, and guidelines that had been developed in other states. In the process of conducting literature reviews, the Roles and Responsibilities Committee of the Coalition discovered that the school nurse, in conjunction with the nurse/health care coordinator from the hospital or rehabilitation center, could form an effective partnership to act as liaisons between the medical and educational communities. Further examination of the literature revealed that school nurses have frequently been cut from school systems, leaving a number of schools without nursing services. These findings assisted another working group, the Lobbying and Legislative Committee, to establish an important objective that focused on increasing funding for the school nursing program through lobbying efforts in the state legislature. Although still in the developmental stages, the work of the Coalition is already achieving goals to meet the needs of students who remain dependent on medical technology while in Alabama school systems.

The key to the success of the Coalition for Students Who Are Medically Fragile and Technologically Dependent is collaboration between disciplines across the medical and educational fields, coupled with a willingness to develop legislative, and professional support from the State Department of Education, the Academy of Pediatrics, the Nursing Association, and the Board of School Nursing. This requires tremendous involvement and time commitments from professionals, but it is a promising approach for developing collaborative partnerships that can be used across the state to benefit all communities, especially rural areas that are predominant across the nation.

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The youth of today face an increasing complicated and technologically advancing world. Never before has it been so important for our country to have well educated citizens. Development of support systems should be of the highest priority to develop support systems, so that our children graduate from high school.

The effort to keep our children in school and assure they receive the needed education to become a competent citizen is not a simple task. The importance of a collaborative effort to support students who are at risk for dropping out of school is essential for success. By combining the efforts of the families, schools, counselors, teachers, universities, JTPA, and state education departments a successful program, with the commitment to increasing graduation rates of Arkansas youth, has been developed. Youth Opportunities Unlimited (Y.O.U.) is such a program.

Youth Opportunities Unlimited is a drop out prevention program that has successfully proven to lower the drop out rate for Arkansas Youth. In 1988, Arkansas modeled their Y.O.U. program after one developed in Texas, but with the addition of the Follow-up component. This paper will describe the research findings compiled by the Y.O.U. Program and Follow-Up.

The Youth Opportunities Unlimited (Y.O.U.) program is comprehensive drop out prevention program. It is comprehensive because it relies on the collaborative efforts of many interested parties. It is funded through the Service Delivery Areas of the JTPA funding agency. The Follow-up originally was funded by a Carl Perkins grant, but is now funded by the state of Arkansas. The State Department of Higher Education houses the coordination of the program. Each university houses and runs the actually summer program and the Follow-up activities. The counselors and teachers in the public schools refer the students to the program and participate actively in the Follow-up efforts. The families give their permission to attend the program and help coordinators with communication, delivery, and pick-up. They also participate in the Follow-up activities.
The Y.O.U. program is an eight week residential program housed on university campuses. The components of the program include health, recreational activities, classes, work training, and work experiences. Students are also given a complete physical. They take courses that meet state requirements and can be used as electives. They work half a day and earn a pay check for their efforts.

The follow-up components continues for the four year following the student's completion of the summer program. Students are contacted on a monthly basis. Cards, phone calls, newsletters, etc. are used to communicate with the students. The schools are contacted periodically to get attendance and grade information. (A comprehensive description of the Y.O.U. Program and Y.O.U. Follow-Up Component can be found published in the ACRES Proceedings, from the Savannah, Georgia, 1993 Conference.)

The follow-up has demonstrated that the program is successful. The reason for the success of the Y.O.U. Program and Follow-Up is the collaboration and cooperative efforts of groups and individuals that comprise Y.O.U. This drop-out prevention program is not limited to the efforts of only one or two persons. The students who is at risk for dropping out of school are supported from a number of fronts. Because there is a "buy in" from many agencies, groups, and individuals the wholistic efforts are more effective. Each agency or group acts as a support system for the other. Also, because it is based on such a diverse group with specific expertise, the combination of efforts is far greater then what any individual group could do.

Some of the specific roles of the collaborating groups can be delineated in the following way:

Job Training Partnership Act (JTPA):
   a. Funding
   b. Monitoring

Service Delivery Area (SDA):
   a. Determine regulations
   b. Fund specific number of students
   c. Work closely with coordinators of Y.O.U. universities and public schools
   d. Monitoring and accountability

School Teachers:
   a. Recommend students that are at risk for dropping out of school
   b. work closely with counselors in choosing students
   c. work closely with Follow-Up Coordinators in gathering data on students
School Counselors:
   a. Choose students for program
   b. Help make contact with parents
   c. Participate actively in Follow-Up activities

Universities:
   a. Work with Y.O.U. Coordinators
   b. Hire Y.O.U. Director
   c. House Y.O.U. program in summer
   d. House Y.O.U. Follow-Up

Each Y.O.U. Program Director:
   a. Works closely with Y.O.U. Coordinator
   b. Meets with parents and students
   c. Runs you program
   d. Writes final report

Each Y.O.U. Follow-Up Coordinator:
   a. Contacts students monthly
   b. Contacts counselors and teachers
   c. Works with Y.O.U. Coordinators
   d. Writes Y.O.U. Follow-Up report

State Department:
   a. Houses Y.O.U. Coordinators
   b. Coordinates efforts of all Y.O.U. programs
   c. Monitors Y.O.U. and Follow-Up
   d. Negotiates with JTPA's and SDA's
   e. Work with Y.O.U. directors and Follow-Up coordinators
   f. Find sources to fund Y.O.U. Follow-Up

Parents:
   a. Work with Y.O.U. Directors
   b. Work with counselors
   c. Support their children in the Y.O.U. and Follow-Up efforts
The Follow-Up results from the 1988-1992 report high school successful retention efforts. The results are:

The 1988 pilot groups:

- 42 graduated from the program
- 34 graduated from high school or received a GED
- 5 dropped out
- 2 lost
- 1 deceased

(83% graduation rate - 74% state rate)

The 1989 groups:

- 166 graduated from the program
- 143 completed high school or received a GED
- 6 dropped out
- 2 lost contact with

(86% graduation rate - 75% state rate)

The 1990 groups:

- 306 graduated from the program
- 112 completed high school or received a GED
- 164 in school
- 19 dropped out
- 11 lost contact with

(90% stay in or graduation rate - 75% state rate)

The 1991 groups:

- 362 graduated from the program
- 2 graduated high school
- 354 in school
- 6 dropped out
- 0 lost contact with

(too early to comment about graduation rate)
The 1992 groups:

- 381 graduated from the program
- 378 in school
- 3 dropped out
- 0 lost contact with

(too early to comment about graduation rate)

The Total Follow-Up effort 1988-1992

- 1,257 graduated from the program
- 291 complete high school
- 204 in school
- 39 out of school
- 22 lost contact with
- 1 deceased

(95% currently in school or graduation rate as of September 1993)

As can be noted by the high school graduation percentages, the Y.O.U. Program and Follow-Up is a successful option for keeping our kids in school.
BIBLIOGRAPHY


ENGINEERING THE CLASSROOM TO PROMOTE INCLUSION

Joshua Independent School District is located in a rural community south of Fort Worth, Texas and just west of Interstate 35. The majority of the residents are employed outside the county. Joshua Elementary is home campus to 865 students aged 3 to 8 years old. Programs include Preschool Programs for Children with Disabilities (PPCD), Prekindergarten, Developmental Kindergarten, Kindergarten, Prefirst, First grade, Second grade, Special Education services, and Chapter 1 services. Children served through PPCD, other Special Education services, Prekindergarten, Developmental Kindergarten, Prefirst, and Chapter 1 must meet eligibility criteria to receive those services.

During the Spring of 1992, the kindergarten teachers with the special education teacher of the preschool program discussed the possibility of serving students with mild disabilities in the regular class. The regular teachers were promised supports in the way of materials that would help the disabled students as well as other students and perhaps another adult in the room to help as time and schedules allowed. Later that spring, the district voted to implement all day kindergarten. That was the right time to implement our plan.
The PPCD teacher and kindergarten teachers worked together to develop a program in which all children were taught in the regular classroom. We attended state sponsored workshops including Early Learning Together and The Early Childhood Summer Institute. We also read books and articles from professional publications dealing with inclusion. Through much collaboration and planning, we developed a plan in which five year old children who qualify for PPCD are placed in regular and developmental kindergarten classes and are served by both regular and special education staff.

The inclusion program was implemented in the Fall of 1992 in one regular kindergarten and two developmental kindergarten classrooms. The five year old PPCD children were placed in either developmental or regular kindergarten classes based upon the severity of their disability. Each became a member of his/her kindergarten class. Due to the previous use of augmentative communication devices in the PPCD program low verbal children achieved success in regular kindergarten. These devices included picture vocabularies, computers and appropriate software, loop tapes, switch activated devices, the Speak Easy and Introtalker. That year, the special education staff helped the regular education staff by conducting small group lessons during center time. The PPCD students and any others who needed help came to those small groups. The special education staff reviewed and retaught skills that were presented by the kindergarten teacher during lesson time that day. After reviewing data collected on student success, and teacher input, changes were made in the program. This year special education staff are working in the regular classroom during lesson time. They team teach, conduct small group review sessions, and
redirect off task behavior while the teacher is presenting lessons. The special education staff continues to provide resources for and knowledge about the special children in the regular classes.

The implementation of this strategy has required a change in the traditional roles of both the special education personnel and the regular education personnel. Program success has required much joint planning and collaboration. Since teachers come from different backgrounds, they bring different ideas and expectations to the relationship. It is important that all parties feel they can be contributing members of the program. Special educators' roles change in that they become consultants to the regular educators. They provide support to regular educators by passing on knowledge of disabled students and their needs and capabilities. They give teachers alternative methods to help the special and regular education student accept each other as contributing members of the classroom. Special educators have to give up some of their control in that they give up their own classrooms to work in the classrooms of others. For the success of the program, special educators need to be flexible and able to work within the boundaries of another's class. Regular educators also must change their roles to insure a successful program. They, too, give up some of their control by sharing some of the responsibility of planning and allowing another teacher some power in their classroom. Teachers may need to overcome attitudes about special education students and teachers. They need to be aware of differences in abilities and learning styles and be able to address those differences when other students start noticing them. Regular educators may need to modify expectations of special education students by using
different evaluation procedures, and accepting information in different ways. For example, using manipulatives or accepting verbal rather than written answers. For all people involved, flexibility is a must. Each person should be willing to learn new teaching styles, try new ideas, accept others’ ideas, and do things jointly. Everyone should be willing to break out of old routines.

The success of this program has been evaluated in a variety of ways. Student success is evaluated with teacher observation, portfolios, competency testing, Individual Education Plans (IEP) reviews., and the Early Prevention of School Failure (EPSF) screening. EPSF is a nationally validated battery of tests designed to determine the developmental levels and learning styles of four to six year old children. We use the EPSF as a pretest and post test. Overall program success is evaluated through interviews of teachers, parents and administrators. Another measure of success is that students who have participated in this program have continued to be placed in less restrictive enviornments.

Review of these evaluations shows that in the two years the program has been in effect it has been successful. There has been an increase in EPSF scores in all areas. Those areas are receptive language, expressive language, auditory discrimination, visual discrimination, visual memory, fine motor skills, and gross motor skills. The most notable increases have occurred in receptive language where some children have increased scores by two years. Children with disabilities have benefited from being in a regular class where there are peers to model behavior and expectations are higher. Children who do
not qualify for special services have benefited from having extra support from the special education staff. All children have benefited from being in the classroom together on a daily basis. Self esteem increases for disabled students when they have success in a regular class. Self esteem for non disabled students increases when they learn they can help their peers. All students learn lessons from each other. Social behavior and acceptance of differences has increased for disabled and non disabled students. Students who participated in the program last year required less special education support this year and are accepted members of the regular class to which they have been assigned.

We believe that all students belong to the regular community and the regular program. By giving special education support within the regular class placement, more children will become more caring and more successful. Some students may continue to need some pull out support. Our goal is to provide all services possible in the regular program. This includes support services such as occupational therapy, speech therapy and physical therapy. Our next step is to work with local day care centers to include disabled three year old children in a program with their non disabled peers. Stainback and Stainback (1990) define inclusive schools as places “where everyone belongs, is accepted, supports and is supported, by his or her peers and other members of the school community in the course of having his or her educational needs met.” This is our vision for our school.
REFERENCES


MULTI-UNIVERSITY CONSORTIUM FOR TEACHER TRAINING: A MODEL FOR PRE-SERVICE TRAINING IN RURAL AREAS

By definition a consortium is an agreement between institutions and organizations to combine resources in order to accomplish a common end which individual organizations could not accomplish on their own. By combining financial and personnel resources larger programs become possible and are enhanced by the contributions of a greater perspective. This presentation provides an example of a program which was developed with such a consortium approach.

HISTORY
Utah faced long-term critical shortages in the numbers of teachers qualified to serve hearing impaired/deaf and visually impaired/blind students. The situation was compounded by problems with recruitment as well as retention. Four concerns were the impetus for concern: (1) enrollment growth was predicted to continue for many years; (2) the number of certified teachers in hearing impairments and visual impairments was declining; (3) teacher turnover was high and increasing; and, (4) no state approved preservice program existed for training teachers in hearing impairments or visual impairments on a state-wide basis.

Most of the 40 school districts in Utah are in rural areas and have difficulty in recruiting and retaining qualified teachers. Most of the districts have difficulty recruiting even when advertising nationally and in retaining trained staff for any length of time. Consequently, it was becoming increasing common for teachers who were not certified in either hearing impairments or visual impairments and who had very limited background and training in this area to work with this population of students. This practice was even more problematic in light of the fact that in order for these students to receive an appropriate education, a higher level of teacher knowledge and skill is required than for most areas of education. This became even more apparent through a teacher needs survey disseminated throughout the state. Over 50% of the teachers of student with hearing impairments and over 75% of the teachers of students with visual impairments reported that their students were multiply disabled. These disabilities included cerebral palsy, intellectual handicaps, orthopedic handicaps, autism, behavior disorders, medical fragility, learning disabilities, and other sensory impairments (deaf/blind).

The existence of this teacher shortage was a direct result of program cuts on the part of one of the major universities in the state. The role assignment to
prepare teachers in hearing impairments was granted to the University of Utah by the State Board of Regents in the mid 60's and to prepare teachers in visual impairments in the early 80's. The program in hearing impairments was the major source of teachers of hearing impaired students in Utah and was the only teacher preparation program of its kind in the state and much of the mountain states region. This certification program met State Board of Education Standards as well as national accreditation standards. The program in visual impairments was implemented on a summer, work-shop basis through the cooperation of numerous agencies. Funding for both programs disappeared in 1986. State budget cuts (the University of Utah's share was $5.5 million) had major impact on the education of students with sensory impairments.

There was clearly a critical need for a model preservice program for training teachers of students with sensory impairments in Utah. Based on past experience, it was also clear that any model program would need to be cost effective and efficient. It would also need to be implemented in such a manner that it would prepare teachers in urban as well as rural districts.

PROGRAM DEVELOPMENT
FUNDING
The first step was to contact individuals and agencies who were directly impacted by this teacher shortage including parents, the State Office of Education, representatives from local school districts - rural and urban, and the Utah Schools for the Deaf and the Blind. Through a series of initial meetings with a loosely organized representative group, it was determined that initial development funding was required. The initial project was established through the Utah State Office of Education, At Risk Division, and funded through a combination of federal, state, and private foundation grants.

STRUCTURE
Two important decisions were made from the on-set of this project. First that the umbrella term of Sensory Impairments would encompass both hearing impairments and visual impairments. Even though the training curriculum would be distinct in each area, a primary concern was to keep administrative costs to a minimum. Combining these two areas into one also enabled a larger population of teacher trainees to be identified with a single program.

Second, an advisory board carefully selected to represent the various factions which were impacted by or could impact this training model was vital to its structure and continuation. The advisory board consisted of university department chairs from each of the participating universities; parents of children with hearing impairments and parents of children with visual impairments; adults who were visually impaired or hearing impaired; special education program coordinators from both rural and urban districts; specialists from the State Office of Education, At Risk Division; coordinators for urban and rural programs, and the assistant superintendent from the Utah Schools for the
Deaf and the Blind; representatives from the Legislative Coalition for People with Disabilities; and an assistant commissioner from the Utah System of Higher Education.

PROGRAM REQUIREMENTS
Involvement of the three major teacher training institutions in the state was vital to recruitment of students statewide. This also enabled students in rural areas to participate while remaining in their communities. The Special Education Departments in each of these universities agreed to cooperate in program requirements as follows:

Admission Requirements:
Teacher trainees would select one of the three participating universities as their home university. They would meet university and department admissions requirements and apply for admission before the end of their second quarter/semester.

Course Work Requirements:
Teacher trainees would take a portion of their required courses through the regular university program at their home university, i.e. core special education requirements, and requirements in communication disorders (for those certifying in hearing impairments.)

Specialized Courses in Hearing Impairments or Visual Impairments:
Teacher trainees would register through the continuing education/extension program through the participating universities. These courses would be contracted through the extension programs each quarter/semester. These courses would be taught in only one location in classroom space made available by the Utah Schools for the Deaf and the Blind in their administration offices in Salt Lake; Brigham Young University, Salt Lake Center for Continuing Education; and the State Office of Education, Division for Services for Visually Handicapped.

Since all courses were upper division (graduate level), students could apply these courses toward completion of a Master’s degree in conjunction with their certification program.

RURAL (DISTANCE) EDUCATION
Course Delivery:
Through this program, course work is delivered to more remote regions of the state through the use of video technology including interactive television. Teaching faculty are responsible for grading all assignments, writing support materials, and providing on-going feedback through weekly telephone conferences, interactive television conferences, and when necessary, on-site visits to provide direct support. Teacher trainees are thus able to remain in their own communities while completing the major portion of the teacher
training program. Where appropriately certified and qualified teachers are already present in a rural community, students are also supported by adjunct faculty on-site who facilitate course delivery and assist with supervision of practica. This rarely is the case. Very few teachers certified in either hearing impairments or visual impairments are located in rural areas. It is anticipated that as more students become certified, on-site facilitators will become more available.

Practicum:
Practica are accomplished in several ways. In some locations, sufficient sites exist to enable a traditional student teaching experience in addition to opportunities for on-going experiences under the supervision of a certified, experienced teacher. These locations are few. Presently, most rural training sites have no trained teachers in hearing impairments or visual impairments and the teacher in training is teaching on temporary authorization. Since many of the larger, urban districts and the Utah Schools for the Deaf and the Blind hold school all year, rural students are able to participate in a traditional student teaching experience during the summer months for at least a portion of this requirement. These students find living accommodations through several sources including the residential cottages of the Utah Schools for the Deaf and the Blind, relatives, friends, and university dormitories. Since many of the teachers in training are also employed as teachers of students with sensory impairments, practicum supervisors travel to these regions to model good teaching practice and evaluate teaching performance while the teachers in training are working with their own students.

PROGRAM ACCOMPLISHMENTS
* Over 2,000 Utah public school students with sensory impairments, for the first time, have an appropriate teacher training support system.

*Fifty nine teachers have completed this training in the four years of this project. Half of these teachers are located in rural regions throughout the state.

*Program participation is shared by all cooperating institutions.

*Trainees typically also pursue Master's degrees in Special Education.

*Program delivery is efficient and effective. Nineteen adjunct faculty (2 of whom also serve as practicum coordinators) teach 23 courses each year. The curriculum meets requirements established by the State Board of Education in Hearing Impairments and Visual Impairments and is consistent with best practice and accepted professional standards. There is a project director who in addition to administrative and advising responsibilities, teaches courses and assists with supervision of practica. The project also employs a part time secretary.
CONCLUSION
There are several things that have become apparent during the development and implementation of this program model. The consortium approach provides an opportunity to pool community resources and perspectives. In addition to providing different organizational perspectives and contributing to cost effectiveness, diversity of the teaching staff allows students to be exposed to a wide diversity of ideas and methodologies.

Acceptance of model programs are dependent on the perspective of the community which they purport to serve that the program meets a real need. Participation of that community in the development and ongoing evaluation of the program allows for community ownership and involvement. These ingredients are vital to continuation and support.

As of this writing, the program described above is in the process of seeking ongoing funding support. Presently a Legislative Bill has been introduced in the Utah House of Representatives. It includes an appropriation from the General Fund for fiscal year 1994-95 to the State Board of Regents to fund the Multi-University Consortium for Teacher Training in Sensory Impairments. Ongoing continuation will then be sought through a line item appropriation in the State Board of Regents budget recommendation. If we are successful in this attempt, it will to a large extent reflect the strength of a consortium model.
Introduction

Despite the apparent fact that the greatest number of schools in the United States have been defined as rural, little attention has been paid to the unique issues facing teachers as rural educators. Not only is this lack of attention found in the media, it is also found in teacher preparation programs throughout the United States.

The majority of teachers employed in rural schools are found to be originally from rural areas themselves (Hare, 1991). This finding has assisted rural school administrators in locating and identifying those prospective teacher employees who will be most likely to succeed with the unique demands of a rural school environment. While this fact may assist in the employment of the strongest candidates for successful teaching in a rural community, and the familiarity with the rural school culture that such candidates bring with themselves may be helpful in ameliorating the serious problems faced by the lack of training for teaching in rural communities, it would seem far more beneficial to all concerned for teacher preparation programs to address the needs and issues related to rural schools. None too surprisingly, however, it appears that most of our training programs focus primarily, if not entirely, on the needs and issues related to urban and suburban schools (Campbell, 1986).

If we are to plan effective teacher training programs that address the unique needs of teachers employed in rural settings, we must identify what these needs are. Seifert and Simone (1980) have suggested the following set of characteristics as those which are essential for teachers employed in rural and small schools: the ability and certifiability to teach more than one grade level or subject area; the ability to supervise several extracurricular activities; the ability to adjust to the uniqueness of the community; the ability to overcome students' cultural differences; and, the ability to teach a wide range of abilities in a single classroom. Indeed, many may recognize these characteristics as those which are important to teachers in both urban and suburban schools. While they may be important for teachers in urban and suburban schools, they are most certainly essential for teachers in rural schools!

In addition, while in-service, and staff development activities may be problematic for all school personnel regardless of their school
due to the isolation of many rural schools, there are several specific problems experienced by rural schools when attempting to provide professional development opportunities that other schools -- urban and suburban -- often do not experience. For example, many rural schools are far removed from centers of higher learning, making it extremely difficult, if not impossible, to obtain the resources usually offered by colleges and universities for the purpose of staff development. Berkeley and Ludlow (1991) indicate that the design and delivery of inservice training for rural educators is complicated by three factors: rural schools have limited access to advanced training programs offered by colleges and universities; rural educators have limited financial resources and support for travel to workshops, conferences and other professional development activities; and, attrition among rural educators impedes any attempt at on-going staff development plan. Moreover, rural schools often experience specific problems, e.g., geographic isolation, transportation barriers, cultural differences, and the like, that are not addressed by those who offer staff development. A number of authors discuss the difficulty in providing staff development in general, and in many cases, staff development for rural school personnel (e.g., Apps, 1991; Galbraith, 1990, 1991; Idol, 1983; Marrs, 1984; McKeachie, 1978). Helge (1981) suggested that inadequate staff development was a major contributor to the personnel retention problems frequently experienced by rural schools. And, indeed, staff development may be a necessary ingredient for any recipe that attempts to address the problems of attrition and retention of rural educators.

Professional educators in rural America must be able to cope with sparsity, utilize community resources, be creative and visionary, and maintain a learner-centered orientation. (Galbraith, 1992, p. 309)

Again, if rural educators in the United States are expected to comply with all of the abovementioned expectations, rural schools will need to heavily invest in the professional development of their teachers. Moreover, teacher training programs may need to instill in their training candidates the need for continued staff development, and provide their candidates with the skills necessary to acquire future professional development.

Several universities in the United States do focus on rural teacher training or provide special programs for those interested in rural employment, including, for example, Western Montana College, Brigham Young University, Berea College in Kentucky, Western Michigan University, the University of North Dakota, Murray State University, Western Washington University, and Bowling Green State University in Ohio. These efforts notwithstanding, it seems that it will be necessary, in order to meet the overwhelming need of rural schools, for many more teacher training institutions to develop programming which addresses the teaching requirements of rural schools and permits student teaching experiences in rural school settings (e.g., Gold,
Moreover, it would seem advisable for teacher training programs to assist rural schools in developing staff development programs that would enhance the professional development of rural teachers presently employed.

This paper focuses on a training model that encourages teachers to collaborate for problem-solving and better service delivery through peer training. Sharing of expertise among the professional school staff has been shown to have powerful effects for the empowerment of teachers, and for the improvement of service delivery for students with special needs in rural schools. Working together and sharing, and developing partnerships among staff members, can often answer the difficult questions concerning staff development faced by rural schools.

**Project CREST: A Model Teacher Training Program for Rural Schools**

Project CREST (Collaboration for Rural Education Special Teachers) is a federally-funded, four-year rural Appalachia Ohio teacher-training project (cf. Russell, Williams, & Gold, 1993). The funding was awarded to the Department of Special Education at Bowling Green State University by the U.S. Department of Education, Office of Special Education and Rehabilitation Services. The faculty of Project CREST have incorporated coursework and practicum experiences into their training project with the goal of empowering rural special education teachers to design and implement staff development activities in their home school districts, and with the goal of increasing the likelihood of professional success for teachers new to the rural school environment.

The primary components of Project CREST include the following: 1) a one-year Master's-level teacher training program for rural special educators; 2) a one-year mentoring program for veteran rural special educators and first-year entering rural special educators; 3) a skill training program in the art of collaboration; and, 4) a skill training program in planning and implementing professional development programs. This program, Project CREST, pairs practicing veteran rural special education teachers with first-year novice special education teachers. These mentor-mentee teaching pairs team teach, co-teach, peer teach, and collaborate (Russell & Kaderavek, 1993) in the rural special education classroom of the veteran teacher. In addition to this collaborative teaching, they complete coursework from Bowling Green State University which leads to a Master's degree in education with particular emphasis on collaboration for rural special education personnel.

During the instructional portion of the project, the veteran and novice teachers take turns traveling to a distance learning site during the school day for completion of their coursework. When one member of the pair is on-site for coursework, the other member of the pair is teaching in the veteran teacher's rural special education
classroom. At the end of one academic year and one summer term, both the veteran and novice teachers are eligible to receive their Master's degree, assuming successful completion of all coursework and other degree requirements.

The above characteristics of this project allow veteran teachers to earn a Master's degree without giving up their contracts, salaries, or credit for teaching experience. Furthermore, the characteristics of this training project allow novice teachers to gain one year of mentored teaching experience, a graduate assistant stipend, a one-year credit of teaching experience, and a Master's degree in rural special education.

The primary emphasis of the coursework centers on learning collaboration skills in order to enhance service delivery for rural special education, and on skills and knowledge concerning rural school environments in order to enhance the novice teacher's ability to succeed in the rural school environment. The following courses, with brief descriptions, are included in the Master's degree teacher training program for Project CREST:

EDSE 649: Problems and Issues for Personnel in Rural Special Education, 3 semester hours; is a modified course that relates to developing an understanding of the context of a rural school and its environment as well as knowledge concerning the state-of-the-art of rural special education;

EDSE 680: Foundations and Instructional Strategies for Rural Special Education, 3 semester hours; is a newly developed course designed to promote an understanding of the differences involved in serving students with handicaps in rural and urban environments as well as knowledge of effective service delivery models for rural children and youth with handicaps (including low-incidence handicaps such as severely emotionally disturbed, hearing impaired, and visually impaired);

EDSE 680: Advanced Instructional Design for Rural Special Education, 3 semester hours; is a newly developed course designed to address the participant's awareness of alternative resources in order to provide effective services to rural students with handicaps, and to develop the skills necessary to identify these alternative resources;

EDSE 680: Collaboration for Related Educational Services - I, 3 semester hours; is a newly developed course designed to introduce skills needed in working with citizens, agencies, and other school professionals in rural communities to facilitate cooperation among schools, school professionals, and service agencies to better serve students with handicaps;
EDSE 680: Collaboration for Related Educational Services - II, 3 semester hours; is a newly developed course designed to facilitate an understanding of personal development skills (a) for the participant's own professional growth, and (b) for building local support systems in the participant's rural school environment;

EDSE 680: Peer Training as a Change Process in Rural Schools, 3 semester hours; is a newly developed course designed to address learning methods and strategies for training others in one's specific school environment; participants learn to become trainers of other adults, thereby extending the concepts of collaboration - learned and practiced as a part of Project CREST - beyond their own learning experiences, and sharing with other staff in their home school;

EDSE 697: Practicum in Rural Special Education - I, 6 semester hours; is a course which provides participants with a planned teaching experience in a rural school setting; in particular, this practicum emphasizes those skills gained in Foundations and Instructional Strategies for Rural Special Education, and Collaboration for Related Educational Services - I;

EDSE 697: Practicum in Rural Special Education - II, 6 semester hours; is a course which provides participants with a second planned teaching experience in a rural school setting; in particular, this practicum emphasizes those skills gained in Peer Training as a Change Process in Rural Schools, Advanced Instructional Design for Rural Special Education, and Collaboration for Related Educational Services - II;

EDFI 641: Statistics in Education, 3 semester hours; is an existing course which provides students with knowledge and skills related to statistics as a tool in education and research, and includes descriptive statistics, transformation of scores, sampling and probability, linear correlation and regression, introduction to statistical difference, and basic tests of significance; also, skills in using statistical methods unique to special populations is provided;

EDFI 642: Research in Education, 3 semester hours; is an existing course which provides students with knowledge and skills related to research and includes identification and evaluation of research problems, research designs, use of library resources, data gathering, and writing research reports; unique to this project, this course includes the identification and planning of research projects relative to rural special education settings which participants complete in later phases of this project;
EDSE 680: Professional Development Seminar in Special Education, 1 semester hour; is a course which provides participants with advisement regarding the graduate program in special education, and includes information on available support services for graduate students, faculty research, areas of specialization, forms needing attention for completion of graduate studies, methods for completing degree programs, and other related topics.

Upon completion of the courses and program, Project CREST participants have had the opportunity to develop knowledge of particular characteristics related to rural schools and rural environments; knowledge of the needs involved in the service delivery of special education in rural settings; and, skills needed to use collaboration, professional development, and adult learning techniques as a tool for expanding special education service delivery for rural school districts. In addition, participants have completed a one-year, bi-directional, mentoring program; have completed their Master's degree; and, have engaged in rural special education research as well as numerous collaboration and professional development projects.

Though the primary focus of this preservice training program emphasizes the needs of the rural special education teacher, the collaboration and professional development skills gained by participants are applied to activities that expand the scope of the special educator outside their own classroom. Examples of projects that participants complete include:

a) Community Resources Collaboration Project - teachers are taught collaborative skills to use in working with a specific community resource (e.g., local banks; American Red Cross; Bureau of Vocational Rehabilitation);

b) Auxiliary Service Collaboration Project - teachers are taught collaborative skills to use in working with support services within their school district (e.g., school psychologist; guidance counselor; speech-language pathologist);

c) System Change Project - teachers are taught collaborative skills to use in making changes within the school system (e.g., mainstreaming practices; grading practices; programs for working with at-risk students);

d) Parent Collaboration Project - teachers are taught collaborative skills to use in working with parents (e.g., parent support groups; parent newsletters; parent volunteer groups);

e) Mainstreaming Collaboration Project - teachers are taught collaborative skills to use in mainstreaming students into regular classrooms (e.g., IEP involvement; homework; instructional accommodations);

f) Volunteer Collaboration Project - teachers are taught collaborative skills to use in developing volunteer projects (e.g.,
peer tutoring; senior citizen volunteer projects; student volunteer service projects); and,
g) Staff Development Collaboration Project - teachers are taught collaborative skills to use in developing professional development programs in their schools (e.g., programs on mainstreaming; inclusion; attention deficit/hyperactive disorder; competency testing; collaboration; behavior management).

Inherent within the very nature of Project CREST is the notion of collaboration. The veteran teacher and the novice teacher must work together in completing cooperative planning, teaching and evaluation with the shared rural special education classroom. In addition, the pairs of teachers work together to conduct research on various topics relevant to the rural school community. Though this model for teacher training was developed for special education, it could easily be adapted for use in any teacher training preservice program. To highlight this, one might consider the fact that the Staff Development Collaboration Projects are often designed by the participants for all faculty within the rural school setting where the participants are teaching!

Teachers Teaching Teachers

Project CREST participants gain most of their training on how to plan collaborative staff development programs through the two collaboration courses, and through the course titled "Peer Training as a Change Process in Rural Schools." Collaborative skills in planning professional development programs for other adults are introduced to participants in Project CREST. Through such collaborative efforts, participants learn to conduct needs assessments, to plan and implement staff development programs, and to evaluate these staff development programs. Participants are presented with several models of collaborative program planning and implementation. Examples of the collaborative models include the model employed by West, Idol, and Cannon (1989), and the model used by Friend and Cook (1992).

Within the collaboration courses, participants are taught to identify the stages of professional development represented by those school professionals for whom they are planning the inservice activities. Project participants practice using the Stages of Professional Development Survey developed by Parsons and Meyers (1984). They also use various needs assessments tools such as the Needs Assessment Instrument: Training in Collaborative Consultation Skills for Teacher, Support Staff and Administrators developed by West, Idol, and Cannon (1989). Augmenting these materials are the texts used by project participants: Collaboration in the Schools: An Inservice and Preservice Curriculum for Teachers, Support Staff and Administrators by West, Idol, and Cannon (1989); and, Interactions: Collaboration Skills for School Professionals by Friend and Cook (1992).
In the course "Peer Training as a Change Process in Rural Schools," participants are taught the basic steps for developing professional development or inservice programming. The focus of the course is on learning methods and strategies for training others in one's specific school environment. Participants learn to become trainers of other adults, thereby extending the concepts of collaboration, learned and practiced as a part of Project CREST, beyond their own learning experiences, and sharing with other staff in their home school. More specifically, this course is designed to assist the participants in attaining concepts and competencies, including:

- the ability to recognize variables that effect the adult learner's decision to participate in learning experiences;
- the ability to recognize the importance for obtaining administrative support for adult learning experiences;
- the ability to recognize the degree to which professional responsibility and assignment impact adult learning;
- the ability to recognize the importance to obtain appropriate resources for adult learning;
- the ability to exhibit the following skills which promote adult learning: modeling, peer coaching, process prompts, co-teaching, feedback, error correction procedures, collaboration, and team teaching;
- the ability to motivate adult learners by recognizing the need for their participation in the selection of learning goals, and by providing appropriate incentives;
- the ability to understand the significance of the adult learner's professional routine and style of practice relative to acquisition of strategies and techniques;
- the ability to use formative and summative data for planning, delivering, and evaluating adult learning; and,
- the ability to design, plan, implement, and evaluate staff development programs on collaboration for adult learners in rural school settings.

Resources for instruction of these concepts and competencies include Idol's (1983) framework for conducting inservice programs (i.e., gaining administrative support, selecting topics, surveying teacher needs, designing workshop outline, eliciting preliminary feedback, conducting workshop, obtaining evaluative feedback); Galbraith's Adult Learning Methods (1990) from which participants gain a wealth of knowledge concerning appropriate methods and strategies for use when instructing adult learners; and, Galbraith's Education in the Rural American Community (1992) from which participants gain insight into the needs and characteristics of the adult learner and adult education in rural areas. Furthermore, additional resources and readings from Apps (1991), McKeachie (1978), and others are used to supplement the primary resources.

The primary assignment of the "Peer Training..." course is the completion of an inservice or professional development program by the
Participants at their respective school or school district. This assignment is organized according to the seven basic components previously cited by Idol (1983).

Participants in the first year of Project CREST completed staff development program primarily on the topics of "inclusion" or "collaboration." These professional development programs were, in many cases, planned for both general and special educators. The most common form of staff development program was the one- or two-day inservice program held after school hours. In addition to implementing inservice programs at their own schools, all of the project participants assisted the project faculty in planning and implementing two regional inservice programs on "collaboration" for teachers in neighboring rural communities.

Conclusion

Professional development is an essential ingredient for the ever-changing school system. For rural schools, often isolated from higher education centers and struggling with restricted budgets, staff development becomes an evermore pressing issue!

In order to stay abreast, teachers must become learners involved in lifelong education. Again, this concern becomes evermore pressing in rural schools where teachers deal with a myriad of problems not present in the urban or suburban school environment.

Teacher training institutions need to accept the challenge and begin training teachers to address the needs of staff development for rural professional educators. Teachers need to feel empowered to answer their own school problems by being able to organize staff development to answer these problems, and by being able to utilize the skills of the professionals within arm's reach -- the teacher next door, the teacher in the other building, the special education teacher, the reading teacher, and the many others in the school environment -- who really hold the answers, the keys, to solving today's problems in educating America's rural youth!
References


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INCLUSION: THE KEY TO SUCCESS

Inclusion is what you make it! We have determined that, after talking to professionals across the state and reading an almost insurmountable amount of literature, inclusion can be defined in a variety of ways. Joshua Intermediate School, located in the midst of a rural community near Fort Worth, Texas, defines inclusion as a means of addressing the needs of the special education student while allowing opportunities for success in the regular classroom through coteaching experiences between general and specialty staff. Inclusion, as we see it, is the key to success!

The administrators of J.I.S. began the inclusion process by motivating a select group of general and special education teachers with newfound research advocating student success through regular class placements. Information about new legal developments and reform efforts to help students with challenging needs become successful in the home classroom provided the foundation for a movement toward restructuring. The responsibility of further motivation then fell on the selected teachers as first-hand advocates of the inclusion process. Personal experiences with academically disadvantaged students achieving success in their studies and acquiring socially accepted behaviors through positive role models made it easy for teachers to “sell” inclusion to prospective teammates.

It became as important for us to determine what inclusion IS as it did for us to determine what inclusion IS NOT. Inclusion is more than mainstreaming. Mainstreaming does not allow for a special education teacher to offer support services in the home classroom; inclusion does. When children are mainstreamed they must meet the essential elements of their grade level; whereas, when a pupil is classified as inclusion, the student must meet only the I.E.P. goals, which may or may not include the essential elements of his/her grade level. The I.E.P. goals and the support services of the special education teacher as coteacher contribute to the success of the inclusion process.
Inclusion IS NOT dumping. Dumping can prove harmful to the educational well-being of general and special education students. When a child’s academic success is threatened by the inclusion setting or when a child does not develop the desired social behaviors conducive to the general classroom setting, then everyone involved must reevaluate the situation and make necessary changes. Placing a student in a regular classroom setting does not necessarily guarantee academic success. Neither will a student necessarily develop the desired social skills through exposure to good role models. Since inadequate support of special-needs students could be overwhelming to a teacher, dumping cannot be tolerated as part of the inclusion process.

We use preventative measures such as frequent meetings with administrators, training programs, and professional conferences to maintain an appropriate inclusive school focus. Aside from regularly scheduled meetings with the inclusion team, we have found it beneficial to communicate frequently with the principal of our school and our district’s special education director. Teachers are notified when training programs are offered through our regional service center. The training we receive not only keeps us updated as to effective teaching methods for the inclusion classroom, but it also gives us the opportunity to meet with teachers from other districts and share experiences. Attending professional meetings such as “Inclusion Works!” and the Learning Disabilities Association of Texas Conference enables us to connect reform efforts with the inclusion process as we return to our school with valuable information and the motivation to succeed.

Upon being admitted to the regular classroom, a student with special needs is monitored carefully to determine how much time the student should spend in the home classroom and how much time, if any, he or she should spend in the supplementary resource room. The “ideal” inclusion student is one who is progressing according to his/her Individual Education Plan, is not adversely affected by being in the regular classroom, and does not hinder other students as they learn together. A special education student who does not meet this criteria may need to receive most or all of his/her instruction from the special educator.

The inclusion process continues to evolve at Joshua Intermediate School. Three years ago we had pull-out programs for students with learning disabilities and problem behaviors. Last year we progressed to including
all third grade students with special needs as much as possible in their home classrooms. Some of them were able to handle the same responsibilities as their classmates with modifications. Others were able to build their confidence through a partial pull-out program where the resource teacher expanded on basic instruction. As we follow these students into their second year of inclusion, it appears that they are experiencing more success with instruction on their grade level in their home classrooms. They continue to receive little or no modifications and enjoy the enrichment of working with their coteachers and peers. Our instructional innovations have expanded to include third, fourth, and fifth graders with little or no pull-out, depending on individual needs. We continue to serve a portion of our student population in a self-contained classroom with partial pull-in.

We begin the process of pulling in students with especially challenging needs or severe disabilities to the regular education program by first including them in physical education instruction, music instruction, and artistic education. It may not be long until that student is able and willing to receive instruction in Science and Social Studies from the regular classroom teacher, depending on individual assessment and teacher compliance. The ultimate goal is for this child eventually to receive all or most of his instruction from the regular classroom teacher, provided that appropriate support from personnel is available.

Students with mild to moderate disabilities have been divided evenly among our teams of teachers. At the end of each year all of the teachers from each grade level, regular, inclusion, and special education teachers, meet to disperse students evenly into each classroom. We are able to get a well-balanced, heterogeneous group of learners by carefully placing them according to needs, academic performance, and behaviors. It is especially important that students with special needs be considered very carefully to prevent “stacking” one particular class with more demanding needs than another. Problems sometimes arise, however, when students are evaluated and assessed as having special needs after being placed in the regular, non-inclusive classroom or when arriving to register late in the school year after student assignments have already been made and inclusion classrooms are at their limit in student-teacher ratio.

We should like to encourage others by sharing our experiences, with the understanding that the best way to learn about inclusion is to experience it
for yourself.

The inclusion partnership of regular and special educators is often referred to as a marriage. Often, when a person marries, a friend or family member shares a favorite recipe with the intent of simplifying the cooking process or enhancing the creativity of preparing meals. The following is our recipe for implementation when considering inclusion:

**INGREDIENTS:**
- Time & Flexibility
- Collaboration
- Communication
- Cooperation
- Hospitality
- Preparation
- Cooperative Learning
- Support
- Networks

**DIRECTIONS:**
1. Begin with teacher preparation and hospitality toward the coteacher.
2. Combine cooperation, communication, and collaboration until firm.
3. Sprinkle with support networks and cooperative learning experiences.
4. Add flexibility and time as needed.

**YIELD:**
Serves any student as needed upon assessment of individual needs.

We would like to think that this is a no-fail recipe, but we recognize this as unrealistic. Teaching strategies sometimes must be altered. Learning opportunities may need to be broadened. Resource rooms might become more of a supplementary service. Thus, the key ingredients in the implementation of inclusion are time and flexibility.

Flexibility is the tool that equips our inclusion teachers with the power to meet the special needs of students as they arise. The third grade inclusion team, for example, has chosen an alternating schedule with partial pull-out in the morning and a rotating schedule in the afternoon. The special education teacher begins by dividing her time as evenly as possible among...
her team of teachers. Once the degree of developmental needs per inclusion class is assessed, her time is used more effectively in each home classroom. The fourth grade inclusion team, on the other hand, prefers a more structured schedule, which allows the special education teacher to spend a forty-five to sixty minute period in each home classroom per day. In addition to coteaching with the regular education teacher, she is able to meet more challenging needs of individual students as required during two separate periods of the day. Finally, the fifth grade team of inclusion teachers uses a more structured pull-out schedule for the morning since, in their opinion, the lack of inclusive instruction last year left their students without the necessary skills to achieve success in the regular classroom. The special education teacher goes into a different home classroom every afternoon, with the exception of Friday afternoon, when she hosts a content mastery/study hall in her classroom. We are already preparing and looking forward to next year because the 1994-95 class of fifth graders will have successfully completed two full years of inclusion. We are confident that our willingness to be flexible contributes to the success of our students as they are nurtured through the inclusion process.

While we work together for the benefit of all students through the inclusion process, we find many advantages. The gap that once separated special education and regular education teachers has narrowed: The responsibility of meeting challenging needs students is no longer “theirs” or “mine,” but it is “ours” together. The teachers bond through the experience of enabling a child to achieve success. J.I.S. teachers broaden their own horizons through the practice of inclusion. Special educators have become “regular” classroom teachers, team teachers, resource and consulting specialists, and facilitators of support networks. Regular educators have become “special” teachers, team teachers, collaborators with specialists and facilitators of support networks. Our teachers have been able to narrow the gap in their working relationship by sharing and reaching for a common goal: success for all students in the least restrictive environment.

J.I.S. students are also broadening their horizons as they undergo the inclusion process. Special education students have become more responsible, competent, and concerned citizens of their classroom. Regular education students have become more accepting of differences while building character qualities. Cooperative learning and peer tutoring are two of the elements we have found productive in strengthening the
groundwork for student success.

Since beginning the inclusion process, we have noticed that parent support is more prevalent than in previous years at J.I.S. As we regularly report to parents, we find most of them quite supportive and pleased by the progress their child is making. J.I.S. parents are generally satisfied to know that their child is being encouraged to succeed in his/her home classroom. Frequent conferences allow us to monitor progress and reassess goals as necessary in order to ensure success at the student's most challenging level of learning.

We at J.I.S. will continue to reassess goals as our inclusion program evolves. We are constantly evaluating the inclusion process through observation of student progress and abilities while monitoring grades. We have found that some inclusion students are achieving the same or higher levels of mastery on non-modified work and/or projects when compared to the regular students in the home classroom. When students can achieve success at the required grade level with little or no modifications, the learning support network often decides to dismiss the child from the special education program. In order to continue monitoring the child's success after dismissal, the student may be placed in an inclusive classroom again the following year. The same inclusion students are finding it much easier to participate successfully in cooperative learning projects as their level of confidence increases. Serving children's needs is our primary focus as we strive to maintain a well-balanced program of services.

Barbara K. Keogh, a Professor of Educational Psychology in the Graduate School of Education at the University of California, sums it up best when she says, "Teachers are the central players in bringing about change in practice. It follows, then that our greatest and most pressing challenge is instruction at the classroom level. This is a formidable challenge that requires both creativity and hard work."
References

Books


Periodicals


STEMMING TEACHER TURNOVER IN RURAL SETTINGS: AN ALTERNATIVE APPROACH

Historically, teacher shortages in critical certification areas such as special education have generated extensive dialogue between public education (K-12) and teacher education programs. West Virginia, a very rural and sparsely populated state has been no stranger to these discussions. A review of the West Virginia Department of Education's annual reports, Supply/Demand of Educational Personnel, for the last nine years revealed that nearly one of every three educators assigned to special education settings served on some type of sub-standard license. Further, the percentage of personnel on emergency licenses did not decline significantly in spite of the efforts of both public and higher education.

Investigations into the nature of chronic special education teacher shortages revealed a number of interesting factors contributing to this problem. One fact which became immediately apparent was that there was actually no shortage of fully certified personnel in some areas of exceptionality. For example, in 1991-92, there were 2207 fully certified mental retardation persons teaching in West Virginia (West Virginia Department of Education, 1992). During the same year, there were 1128 employees assigned to mental retardation settings. Among these 1128 employees, 18.7 percent were serving on sub-standard licenses. The same pattern existed for other areas of assignment for a number of years. The illusion of "shortage" was created by state code and regulation which allow certified general educators to use emergency licensure as an entry-level route to secure employment, obtain full licensure in special education while at the same time accruing seniority within their school district. Then, when a general education position opens, the recently licensed special educator may use their senior status to "bid out", leaving yet another assignment to be filled on an emergency-licensure basis. Recognition of this problem served as a primary force in the development of an alternative certification track for students whose formal training was in a field other than education. Prior to describing this program, it is important to set the context within which the development of the alternative program occurred.

Overview-Alternative Teacher Certification

Koff, Floris and Crouin (1976) described traditional teacher certification as a process developed to assure that those who enter the teaching profession meet some set of minimum competency standards. Each state has the latitude to set these standards and a document developed by the National Association of Directors of Teacher Education and Certification annually describes these requirements. Typically, traditional certification programs
included specific credit hour requirements to be earned from higher education institutions in the content (subject) area, professional studies (e.g. methodology) and in practica (student or practice teaching). Colleges and universities typically verify that the candidate has met minimum credit hour standards at which time many state education agencies also require successful completion of competency tests prior to the issuance of the certificate.

Alternative teacher certification, within the context of this paper, may be described as a departure from the more traditional undergraduate route through teacher education programs. In addition, the program to be described differed from traditional certification by establishing a different target population and length of training rather than in program content, vigor or expected outcomes. This was consistent with the position advocated by Smith et al. (1985). Further, the features of alternative programs recommended by the American Association of Colleges for Teacher Education were adopted and included rigorous admissions standards, curriculum appropriate to the beginning teacher, a supervised internship and competency examinations in both the subject field and professional studies.

The alternative program described in this paper is one of a series of programs offered among the states for the purpose of attracting quality adults who already have at least a bachelor's degree into the teaching profession. As of September 1992, fourteen states had alternative certification programs that were recognized in the most recent National Center for Education Information report (1992) on alternative teacher certification.

Program Description

The goal of the alternative special education program is to provide educational opportunities for students at the post-bachelor's and master's degree level to become teachers of exceptional children in one of three categories: mental retardation, specific learning disabilities, or behavior disorders. Individuals seeking certification in the areas of mental retardation, learning disabilities, and behavior disorders may come into the program from non-education fields.

Program experiences in special education involve examining traditional and contemporary practices, using the terminology of the field, and identifying the characteristics of each group of exceptional children relative to historical, environmental, educational, cultural, legal and political conditions. The utilization of standardized and criterion referenced diagnostic tests in the cognitive and affective areas is also a part of program experiences.

Developing cognitive and affective diagnostic hypotheses for each child and generating and translating those data into educational programming are stressed in the program. Selecting
and developing materials, determining appropriate approaches to
instruction, and developing and using behavioral objectives are
of principal importance. Additionally, planning and developing a
total teaching environment that promotes effective learning
through flexible scheduling in a variety of administrative
arrangements are required experiences in the alternative special
education program.

General Admission Requirements

Students seeking admission to the Special Education Program
must submit the following:

1. Official transcripts from all colleges or universities
   (an undergraduate GPA of 3.0 or above is preferred);

2. Three recommendations on forms available in the Office
   of Admission & Records;

3. Detailed personal statement of life and work experiences
   and career goals and aspirations regarding special
   education; and

4. Score on the Graduate Record Examination (GRE) Aptitude
   Test. A score of 900 or above is preferred. This
   requirement is waived for applicants holding a graduate
degree.

Additional Admission Requirements for Non-Education Majors
Seeking MR, SLD, or BD Certification

In addition to the general admission requirements stated
above, non-education majors seeking K-12 MR, SLD, or BD
certification must:

1. Take and pass the Pre-Professional Skills Test (PPST)
   before enrolling in any special education certification
   coursework. The PPST is waived upon documentation from
   a single test administration of the American College
   Testing Program (ACT) composite score of 25 or above,
   an enhanced ACT score of 26 or above, or a
   scholastic Achievement Test score of 1035. The PPST is waived for
   individuals with a graduate degree.

2. Complete the following prerequisite courses with a GPA
   of 3.25 before beginning special education certification
   coursework:

   - Ed. 500 - Survey: Introduction, History and Philosophy
     of Education 3 hrs.
   - Ed. 516 - Human Development 3 hrs.
Rdng. 525  - Psychological Foundations of Reading  3 hrs.
Sp.Ed. 507 - Introduction to Consultative Collaboration  1 hr.
Sp.Ed. 508 - Mentorship and Effective Teaching  1 hr.
Sp.Ed. 509 - Transition: Planning & Implementation  1 hr.

3. Take and pass the state Multi-Subjects Content Specialization Test (K-8) during the first six hours of certification coursework in Special Education.

Multiple criteria are used in arriving at a decision to admit students to the special education program. Each applicant is evaluated with reference to the following criteria: GRE scores, letters of recommendation, quality of content and written expression in the personal statement, undergraduate grade point average, and performance on graduate courses completed. Flexibility is maintained in the application of the criteria to individual cases through the use of a weighting scale.

If the applicant's weighted score falls below the acceptable minimum for admission as a degree or professional development student, the student may be eligible for provisional enrollment. A student who is on provisional status must take nine (9) hours of specified coursework with a GPA of 3.25 and then reapply for admission as a professional development student. Further, a student admitted as a professional development student may reapply for admission as a degree student if he/she/completes all certification requirements with an overall GPA of 3.25.

Degree Requirements

Each degree program includes all certification work for one of the specializations. Degree students follow a planned program of study and must maintain a cumulative grade point average of 3.0. Degree students are required to plan and implement an original research study in their area of specialization. Students must also pass a written comprehensive examination.
Program of Studies
Master's Degree in Special Education

A master's degree may be earned with a specialization in one of three areas: Behavior Disorders, Mental Retardation or Specific Learning Disabilities. Students are responsible for checking all course descriptions for prerequisites.

Program Requirements for BD, MR, and SLD

Core Courses Required in BD, MR and SLD* 12 hrs.

Sp. Ed. 500 Introduction to Special Education
Sp. Ed. 550 Assessment in Special Education
Sp. Ed. 553 General Program Planning for Exceptional Children
Ed. 501 Seminar: Educational Research

Certification Area Specific Courses* 9 hrs.

Learning Disabilities

Sp. Ed. 504 Characteristics and Etiology - LD
Sp. Ed. 561 Program Planning and Implementation- LD
Sp. Ed. 610 Field Experience - LD (1-3 hrs.)

Behavior Disorders

Sp. Ed. 503 Characteristics and Etiology - BD
Sp. Ed. 556 Program Planning and Implementation - BD
Sp. Ed. 611 Field Experience - BD (1-3 hrs.)

Mental Retardation

Sp. Ed. 501 Characteristics and Etiology - MR
Sp. Ed. 559 Program Planning and Implementation - MR
Sp. Ed. 609 Field Experience - MR (1-3 hrs.)

Required Degree Courses 18 hrs.

Approved Electives (12 hours)

Total Hours for Degree 39 hrs.

*Students must complete 12 hours of core courses and 9 hours of certification area specialization courses to obtain initial certification in each area. Additional endorsements may be added with the completion of 7-9 hours of certification areas specific courses.
Additional Certification Requirements

All Special Education majors must take the Content Specialization Test in the area(s) in which they seek endorsement, i.e., B.D., S.L.D., and M.R. The Special Education Content Specialization Test is taken at the end of the certification coursework in Special Education.

Students

This alternative program was initiated in the 1986-87 academic year. Since that time, 94 students from non-traditional backgrounds have sought admission to the program. The average student was 34 years of age, had two children and was otherwise fully employed. Only four students attended classes on a full-time basis. Additionally, these students were drawn from 27 of the state's 55 counties.

Course Delivery

Delivery of coursework is always a challenge for an institution which has a "campus with walls" orientation. In order to avoid becoming "campus bound", a variety of techniques have been utilized to service rural students. Traditionally, the institution has relied heavily on a cadre of carefully selected adjunct faculty who join full-time faculty in traveling to one of the seven "distant" sites. In addition, both audio-only and video-teleconferencing (with audio bridge) are utilized to link distant sites with professors. To date, identification of cohort groups formed to participate in the preliminary block of coursework has been only partially implemented due to the geographic dispersion of these non-traditional students. Finally, a variety of alternative class meeting schedules have been developed to fit the nature of some coursework or a particular group of students.

Results

Students who participate in this alternative program typically have three competency tests to master in addition to coursework and prior to receiving a recommendation for certification. The special education program has utilized competency tests developed by the State Department of Education via contract with National Evaluation Systems for this purpose. The first is the Preprofessional Skills Test (PPST) which measures basic skills in the areas of mathematics, reading and writing. This test is waived for applicants with acceptable performance levels on either the ACT (25) or an SAT score of 1035 or for those holding a graduate degree. Results thus far are summarized in Table 1.
TABLE 1
NUMBER OF EXAMINEES AND PASS RATES FOR PPST BY INSTITUTION AND STATE

<table>
<thead>
<tr>
<th>Institution (alternative program)</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Examinees</td>
<td>32</td>
</tr>
<tr>
<td>Examinee Pass Rate (%)</td>
<td>90.4</td>
</tr>
<tr>
<td></td>
<td>8937</td>
</tr>
<tr>
<td></td>
<td>92</td>
</tr>
</tbody>
</table>

The second competency test is the Multi-subject Test (Grades K-8). This test is typically required by students exiting four year early/middle childhood (K-8) teacher preparation programs. An underlying assumption of all K-12 special education certification programs described earlier is that the non-traditional student will be able to demonstrate those skills by successfully completing this test. Results to date are summarized in Table 2.

TABLE 2
NUMBER OF EXAMINEES AND PASS RATES FOR MST (K-8) BY INSTITUTION AND STATE

<table>
<thead>
<tr>
<th>Institution (alternative program)</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of examinees</td>
<td>71</td>
</tr>
<tr>
<td>Percent Passing</td>
<td>87.0</td>
</tr>
<tr>
<td></td>
<td>2835</td>
</tr>
<tr>
<td></td>
<td>92</td>
</tr>
</tbody>
</table>

Having successfully mastered the first two competency test requirements, the student is eligible to complete the remaining certification coursework, the clinically supervised practicum and the final exceptionality-specific (SLD, BD or MR) competency test required for certification. Results to date are summarized in Table 3.
TABLE 3

NUMBER OF EXAMINEES AND PASS RATES FOR SP. ED. COMPETENCY TESTS BY INSTITUTION AND STATE

<table>
<thead>
<tr>
<th>Institution (alternative program)</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Examinees</td>
<td>61</td>
</tr>
<tr>
<td>Pass Rate (%)</td>
<td>98.1</td>
</tr>
<tr>
<td></td>
<td>1153</td>
</tr>
<tr>
<td></td>
<td>96.4</td>
</tr>
</tbody>
</table>

Discussion

Of a total of 88 students from non-traditional backgrounds who have sought special education licensure through this alternative route, 56 have completed all certification requirements successfully. It is important to note the effect of the succession of competency testing requirements upon the terminal licensure testing success ratios for the alternative program. On the surface, it appears that these screens have successfully filtered the applicants for desirable qualities and potential as is evident in the high success rate for those at the final competency determination level of testing. One limitation of the study (and one that bears further investigation) is the fact that the competency testing utilized specify minimum competency levels rather than more advanced performance standards.

"States report that more than 20,000 people have been licensed through alternative certification programs since 1985" (National Center for Education Information, 1992). It is the belief of this writer that those students who have completed this alternative certification track meet the most important performance criterion of being "safe to practice", a standard proposed by Williamson et al. in 1985. Currently, efforts are being made to examine retention rates via a follow-up study. If the turnover rate for these special educators is significantly diminished as expected, one more puzzle piece may be added in the effort to serve special needs students in rural settings.
REFERENCES


INCLUSIVE EDUCATION FOR ALL STUDENTS

Traditionally, when students with exceptional needs have been placed in the regular education classroom, support from pull-out programs such as special education resource, Chapter 1, and other compensatory education programs has been typical. However, reliance on pull-out programs and self-contained compensatory education classrooms is presently decreasing. Current trends indicate that schools are moving toward more inclusive practices and are attempting to educate the majority of students in the regular education classroom.

Momentum for full inclusion has been strengthening since the passage of the Education for All Handicapped Children Act of 1975 (PL 94-142), which embraces two landmark components - “free appropriate public education” and “least restrictive environment”. Full inclusion is a movement that primarily addresses the second component. The Individuals with Disabilities Education Act (PL 101-476), which updated PL 94-142, further strengthens these components.

Restructuring schools to implement full inclusion will require that leaders consider factors that influence change. Hord (1992), suggests a useful framework. This framework includes the following:

- Creating an atmosphere and culture for change,
- Articulating the vision,
- Planning and providing resources,
- Providing training and development,
- Monitoring and checking progress, and
- Continuing to give assistance.

The following sections will discuss how school leaders can apply each of these components to the implementation of full inclusion at the campus or district level.

Creating an Atmosphere and Culture for Change

In order to implement full inclusion, leaders need to create an atmosphere and culture for change. According to Boyd (1992), school context is comprised of two dimensions - ecology and culture (Refer to Issues, Vol. 2, No. 2 for further information).

Ecology

Ecology pertains to physical surroundings and structures, formal policies and rules, and available resources. Physical surroundings and structures in schools include the size of the school, the physical layout of the campus, and patterns of scheduling. Policies and rules pertain to federal, state and local mandates with which schools must be in compliance. Resources include funding, time, materials, and personnel necessary to implement an innovation (Boyd, 1992).

Physical surroundings and structures. Leaders can facilitate the implementation of full inclusion by analyzing the physical surroundings and structures of the school. The layout of the campus buildings and individual classrooms are factors to consider when preparing for full inclusion to ensure that students with disabilities have access to...
all facilities. Patterns of scheduling also need to be considered in order to accommodate all students in regular education classrooms. Flexible block scheduling is one way to encourage collaboration and team teaching when teachers are provided with common planning times. Other ways a principal can provide release time for teachers to plan include:

- hiring substitutes to teach classes,
- departmentalizing,
- combining classes periodically,
- scheduling assemblies on a regular basis, and
- building early dismissal days into the school’s schedule by increasing the length of some school days in order to shorten others (Beck, Broers, Hogue, Shipstead, & Knowlton, 1994).

For students who require services outside the regular classroom, such as Chapter 1 and special education services, flexible scheduling could include an elective time period during for which some students go to enrichment or high interest programs while others are provided with remedial support. This elective time provides for “added” support rather than “instead of” services to ensure that all students are in the regular classroom, benefiting from the regular education curriculum (Wheelock, 1992).

Formal policies and rules. Formal policies and rules comprise another feature of a school’s ecology. Federal, state and district policies and rules influence the degree to which full inclusion may be implemented. Leaders can influence change by analyzing policies and rules to determine whether such mandates facilitate or inhibit full inclusion. If certain policies and rules inhibit the implementation of full inclusion, new policies should be developed. According to Hehir, Stariha and Walberg (1991) guidelines to consider when creating system-wide inclusion policies include:

- Principals are responsible for educating all students, regardless of their needs;
- Students attend schools which they would typically attend if they did not have exceptional needs;
- Education is provided for all students in age-appropriate settings;
- Education is provided in the regular classroom to the greatest extent possible;
- Support personnel, such as special education teachers and therapists, provide services in the regular education classroom as much as possible;
- All students with exceptional needs are provided with individualized assistance of a non-categorical nature; and
- All students are provided with assistance regardless of whether or not they have a label or an Individualized Education Plan (IEP).

A policy which can be adopted at the local level may include the implementation of a pre-referral process. Garcia and Ortiz (1988) developed such a strategy in order to ensure that students with special needs are provided with an appropriate education. A pre-referral process may also be useful in reducing the number of inappropriate referrals for special education, increasing the efficiency of services provided, and ensuring more appropriate programming and support services for all students (Garcia & Ortiz, 1988).

Resources. The degree to which full inclusion is implemented is influenced by the availability of resources at the local school level. Time is one integral resource when successfully implementing full inclusion. Numerous efforts to change do not succeed because sufficient time for planning and implementation has not been provided.
Simpson, 1990). Taking time is not only important from an organizational perspective (i.e., to assure that all of the logistical and organizational details associated with inclusion are addressed). Time is also a necessary component in making sure that personnel are adequately prepared for such a change.

Funding is another essential resource for ensuring that all students are educated to the greatest extent in the regular classroom. According to Huestis (1993), funding systems should allow resources to be used to educate all students without impending ramifications or penalties. It will be necessary to work with the state education agency to assure that funding remains adequate and that using allocated funds in different ways is approved.

Still another essential resource includes the availability of adequately trained support personnel to work with regular education teachers in providing appropriate educational opportunities for all students. In most cases this will involve only the reassignment of paraprofessionals and support teachers (Chapter I, Special Education, etc.) to regular classroom settings. In some instances additional support personnel may be necessary. For those students with remedial needs or with mild disabilities, additional tutoring or modification of class content may be provided through support teachers, paraprofessionals and/or peers (Wheelock, 1992). Support teachers may also team teach with classroom teachers to provide for more individualized instruction to all students requiring additional attention. For students with more serious disabilities, support teachers will need to work closely with classroom teachers and paraprofessionals to ensure that instruction is “parallel” to that in the regular setting (Tompkins & Cooper, 1993).

Culture

The second dimension of a school context includes culture. Attitudes and beliefs, school norms and relationships comprise a school’s culture. Thus, leaders must address the school culture and that of the community when attempting to implement full inclusion.

Attitudes and beliefs. Attitudes and beliefs to consider when implementing full inclusion include those of students, teachers, support personnel and administrators. The community’s attitudes and beliefs towards educating all students in the regular classroom also need to be addressed. Leaders must attempt to satisfy what the community believes is proper for schools due to the influence which external groups can have upon changing institutions (Cuban, 1990). Leaders can influence the attitudes and beliefs of individuals involved in the change by providing examples of successful full inclusion as well as involve representatives from each of the groups in the planning process.

Norms. Leaders need to attend to the informal rules that govern behavior (i.e., “the way things are done here”). Some school norms will need to change. Rather than working more or less independently, regular and special educators will need to share the responsibility of educating all of their students. School personnel will need to convey by their actions that all students are welcome in regular classrooms. Leaders can influence the school’s norms by recruiting personnel who are committed to the philosophy of inclusive classrooms (Tompkins, & Cooper, 1993). Norms which reflect ownership for educating all students in the regular classroom include eliminating labels that convey a hierarchy of achievement and setting common expectations about discipline, homework and accountability (Wheelock, 1992).
Relationships. Another component of a school's culture includes relationships such as those between: (1) teachers and their peers, (2) students and teachers, (3) students and their peers, and (4) school personnel and the community. Leaders can facilitate positive relationships among teachers by encouraging collaboration and team teaching. Leaders can also influence student and teacher relationships by fostering attitudes of high expectations for all students. School leaders can promote the integration of students with exceptional needs into regular classrooms by providing all students with opportunities to be accepting of others (Demchak, & Drinkwater, 1992). Opportunities for integration may include promoting peer tutoring, assigning peer “buddies,” and incorporating cooperative learning strategies. Relationships between school personnel and the community can be enriched by having continuous communication with parents of all students. Weekly newsletters about school activities and student performance can be used as a method for sharing information with the community (Field, LeRoy, & Rivera, 1994). Parents can also be encouraged to play an integral role in the implementation of full inclusion by soliciting their assistance for planning purposes and for providing support in the regular classroom.

Articulating the Vision

A second component which leaders should consider when implementing full inclusion involves articulating the vision with parents, students and teachers. School leaders must genuinely believe that all students should be educated in the regular education classroom to the greatest extent possible (Guerra, Jackson, & Madsen, 1993). School leaders must also demonstrate their beliefs by acting in a manner consistent with such beliefs.

According to Louis and Miles (1990), leaders of change must go beyond articulating the vision. School leaders must also share the influence, authority, responsibility and accountability with others so that shared ownership of the vision results (Louis & Miles, 1990). When implementing full inclusion, all individuals involved (i.e., parents, teachers, administrators and related service providers) must also envision full inclusion and adopt it (Tompkins, & Cooper, 1993). In order to promote “buying into” the vision of full inclusion and acceptance of persons with exceptional needs, leaders can:

• speak to groups of parents, community members and school personnel (Beck, Boers, Hogue, Shipstead, & Knowlton, 1994),
• encourage dialogue between parents and school personnel by hosting meetings to discuss issues and concerns related to full inclusion (Wheelock, 1992),
• expose parents and staff to successful integration efforts undertaken by other schools, and
• create a realistic time-line that can facilitate a shared vision for educating all students in the regular classroom.

Planning and Providing Resources

When attempting to implement full inclusion, leaders must also plan and provide for needed resources. School leaders must identify, plan and provide for time, money, building space, personnel, and other resources needed to appropriately educate all students in regular education classrooms. Provision of such resources may entail various political interactions at the local, state and federal levels (Tompkins, & Cooper, 1993).
Guerra, Jackson, and Madsen (1993) warn that funding, training and personnel should be in place prior to decentralizing of services; thus, sufficient time for planning is essential. To implement inclusive practices prior to thoughtful planning and preparation could negatively influence the attitudes of individuals involved in full inclusion as well as “doom children with special needs to injury and failure” in the regular classroom (Guerra, Jackson & Madsen, 1993, p.1).

Providing Continuous Staff Development

Facilitative leaders need to provide continuous staff development for all constituents (Ervin, 1991). The implementation of inclusive practices will require that constituents be provided with opportunities to develop skills. Ongoing staff development should focus on the development of critical attitudes, commitment and competencies required to work effectively with students who have diverse needs (Tompkins, & Cooper, 1993). According to Ervin (1991), development programs for individuals involved in the change should include:

- awareness training,
- communication,
- collaboration,
- compromise, and
- consensus building.

Educating all students in the regular classroom requires that regular education teachers understand the unique learning styles of students with exceptional needs, special education instructional strategies, and how to foster home/school collaboration (Field, LeRoy, & Rivera, 1994). Special education teachers, however, need to understand the learning styles and activities of students in regular education classes, as well as the curriculum, instructional strategies and communication patterns which are typical of regular education programs (Field, LeRoy, & Rivera, 1994). Parents can also be provided with training workshops in order to reinforce learning at home (Wheelock, 1992).

Although a continuous staff development program should be implemented to provide support and training for constituents, such a program should be based on the results of a needs assessment (Tompkins, & Cooper, 1993). According to Sergiovanni (1990), however, staff development in the early stages of implementing an innovation should entail modeling and demonstrations. After individuals have had the opportunity to practice skills, training workshops become more effective (Sergiovanni, 1990).

Assessing Progress

For full inclusion to occur, regular monitoring and assessment need to be integral components of the change process. Continuous monitoring is necessary to coordinate inclusive efforts within the school and to deal with problems which may arise in an effective manner (Louis & Miles, 1990). According to Tompkins and Cooper (1993), monitoring entails the collection and assessment of data regarding what is occurring in classrooms on a periodic basis. Collection of such data may involve formal as well as informal procedures. Formal procedures for assessing the implementation of full inclusion can include surveys and observations. Hord (1992) suggests that effective leaders can informally monitor by frequently visiting classrooms, walking through school hallways, attending departmental and grade-level meetings, and conducting spontaneous conversations with individual staff members. Shortly after formally or informally observing staff members, effective leaders should also provide feedback for improving their use of new practices (Rutherford, 1985).
Prior to and during implementation of full inclusion, it is critical that concerns of teachers and other constituents are also addressed. Hall (1979) has identified seven stages of concern which users of an innovation (such as full inclusion) may experience. These are:

- **Stage 0**: Awareness
- **Stage 1**: Informational
- **Stage 2**: Personal
- **Stage 3**: Management
- **Stage 4**: Consequence
- **Stage 5**: Collaboration
- **Stage 6**: Refocusing

Stages 0-2 are typically experienced during the initial planning phase of an innovation like full inclusion. Stage 3 typically occurs during the final stages of preparation and the initial stages of actual use. Stages 4-6 are evident when teachers are concerned with the effects of the innovation on students (Hord, Rutherford, Hulling-Austin, & Hall, 1987).

As school leaders begin to consider and plan for a restructuring effort like full inclusion, many of their teachers and other school personnel will exhibit Awareness concerns. They will know little about full inclusion. Facilitative leaders can involve these teachers in discussions about inclusive practices, providing them with just enough information to arouse their interest. They may also provide opportunities for these teachers and others to talk with teachers who have successfully used inclusive practices (Hord, Rutherford, Hulling-Austin, & Hall, 1987).

After teachers' interests are aroused, they will be interested in gathering more concise information about full inclusion (Informational concerns). Opportunities to observe teachers in schools that have adopted an inclusive philosophy may be helpful for these teachers. Leaders should also ensure that teachers see how their current practices are similar to and different from those being recommended (Hord et al., 1987).

As school leaders move from planning to implementation, many of their teachers will have Personal concerns—"How will this change affect me and the way I teach?" Encouragement and assurance of support are important at this point (Hord et al., 1987).

Once implementation begins, teachers and others will have questions regarding the "how-to's" of accommodating all students in the same classroom. These teachers have Management concerns. How to plan and organize for a wider range of student abilities, how to work with paraprofessionals and others to maximize their usefulness in the classroom, and how to go about collaborating with other teachers are some of the issues that teachers with management concerns will have. The facilitative leader will need to provide or arrange for support for these kinds of concerns.

When teachers become familiar with full inclusion and acquire the skills and experiences to deal with their management concerns, they may then be able to focus on the impact that they are having on their students. Teachers with Consequence concerns want to refine their teaching abilities. Staff development opportunities to learn new techniques, information, etc. about how to better meet their students' academic needs are important for teachers at this stage of concern.

Once teachers become skilled and confident in working with their students and support personnel, they are able to focus on improving the "system" even further.
Through **Collaboration** and **Refocusing**, they may be able to determine weaknesses in the way full inclusion is working and work together with other teachers and school leaders to improve services or organizational structures. In this way teachers are more efficient and effective and students are better served.

It is important for the facilitative leader to realize that not all teachers will have the same level of concerns at the same time. Nor will they progress at the same rates through these stages of concern. The role of the leader is to assess what concerns individual teachers have and to address those concerns appropriately. It is also important to realize that as modifications are made to address deficiencies noted from other monitoring efforts, teacher concerns will also change.

### Providing Continuous Assistance

Successful implementation of inclusive practices require that facilitative leaders provide continuous assistance to teachers. As teachers become more familiar with inclusive practices, their concerns will change; thus, leaders need to be aware of such changes and provide appropriate assistance. Needed resources and staff development need to be more than "one-shot events" (Hord, 1992); as a result, continuous assistance is imperative for the success of full inclusion. Joyce and Showers (1980) refer to such assistance as "coaching". Coaching has been found by Bush (1984) to greatly influence the successful transfer of new practices into classrooms. Therefore, in-class demonstrations and modeling can be used to transfer knowledge obtained through research and theory into practice (Tompkins, & Cooper, 1993).

### Summary

Restructuring of schools to implement full inclusion will require that school leaders consider various factors that influence change. Factors to consider include:

- Creating an atmosphere for change,
- Articulating the vision,
- Planning and providing resources,
- Providing training and development,
- Monitoring and checking progress, and
- Continuing to give assistance.

Creating an atmosphere and culture for change involves addressing the school’s physical surroundings and structures, formal policies and rules, resources, attitudes and beliefs, and relationships. Articulating the vision emphasizes the importance of expanding the vision held by a few to a broad base of parents, students, and teachers. Articulating the vision also entails school leaders demonstrating their belief in full inclusion by acting in a manner that is consistent with their beliefs. Planning and providing resources involves the identification, planning and provision of time, money, building space, personnel, and other resources needed to appropriately educate all students in regular education classrooms. Providing continuous staff development, stresses that all constituents need to be provided with opportunities to develop the knowledge and skills necessary for the successful implementation of full inclusion. Assessing progress means regularly monitoring and assessing the progress toward full inclusion. Assessing progress also includes addressing the constituents’ felt needs and concerns related to full inclusion. The final factor, providing continuous assistance, requires that resources and staff development are more than “one-shot events.” “Coaching” is suggested to ensure that new practices for successful implementation of full inclusion are appropriately incorporated into regular education classrooms. By
considering all six factors, school leaders can facilitate the successful implementation of full inclusion.

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During the 1980s a reformed vision of education was spawned that, by the end of the decade, was evidenced in schools throughout the nation. Due to diminishing federal and state fiscal resources, concern over increasing indicators associated with at-risk students, and emerging initiatives promoting local educational decision making, school-community partnerships grew nationwide. These partnerships typically focused on one of four themes: 1) "adopting" schools by businesses or communities, 2) using mentors or volunteers from the community or private sector, 3) providing incentives to students through grants or loans for continuing their education, and 4) introducing students to the world of work (Office of Educational Research and Improvement, 1987).

Examples of existing school-community partnerships portray these various themes, often emphasizing a public-private sector marriage to facilitate students' successful post-secondary school transition into the workforce. The Boston Compact is a joint effort between the Boston schools and nearly 350 businesses to raise achievement levels of students in return for hiring priorities for graduates and summer jobs for qualified students (Office of Educational Research and Improvement, 1987; Silver, 1990). In Atlanta, Rich's Department Stores has established an academy in renovated store space to assist youth involved with the juvenile justice system. School personnel work with store employees in teaching remedial academics, and management of personal and legal problems (Zimmerman, 1987). Florida's Dade County Schools and the South Florida Employment and Training Consortium have collaborated to increase youth employment and graduation rates of at-risk 9th and 10th grade students. Students receive remedial instruction and counseling, while mentors guide them in developing career goals (Office of Educational Research and Improvement, 1987). Champion International, a paper making corporation invested $2 million with the Stamford, Connecticut schools which was used to hire a full-time consultant, finance a summer school for low achieving students, and sponsor bi-weekly training sessions for every teacher in four newly built middle schools. Since the middle schools opened in 1990, attendance rates have doubled, 15 of 18 summer school students are on the honor roll, and 93% of the parents report that their children are happy at school ("Saving Our Schools," 1992). Parental and community involvement is also a key component of the Accelerated Schools movement ("True or False," 1993).

While the efforts and success of these and other school-community partnerships are exemplary in promoting achievement among
at-risk youth, there is a decidedly urban focus to their implementation. One possible reason for this emphasis is the fact that private sector perspectives often reflect the urban areas in which businesses are located (Vermilion, 1986). In addition, much publicity has been given to the large numbers of at-risk children and youth in our nation's urban centers (see, for example, Maeroff, 1988). These efforts to address the problems of urban schools should not be minimized, however, it is worth noting that rural schools still bear a significant responsibility in educating America's youth. Even though approximately 62% of the school children in the United States come from non-rural areas (Pepple, Law, & Kallembach, 1990), nearly 60% of the nation's school districts are rural with three-quarters of their students living in towns with fewer than 2,500 residents (Spicker, 1992). In fact, many of these rural districts must attend to problems and issues similar to those of their non-rural counterparts.

Another problem with some current school-community partnerships is that while they often target at-risk populations, students with disabilities may not be included unless they are also considered to be "at risk." With regard to successful post-secondary transition, students with disabilities should be considered at risk. Follow-up studies of high school leavers with identified disabilities have typically found elevated rates of unemployment and underemployment as these individuals enter young adulthood (see, for example, Edgar, 1987; Halpern & Benz, 1987; Hasazi, Gordon, & Roe, 1985; Hasazi, Gordon, Roe, Hull, Finnk, & Salembier, 1985; Mithaug, Horiuchi, & Fanning, 1985; Sitzlington & Frank, 1989; Sitzlington, Frank, & Carson, 1990, 1991).

While not as numerous as examples from urban areas, reports of rural school-community partnerships show promising results. Martin (1986) discussed the positive outcomes of community-based cooperative education in a rural Maine school district. A partnership between a rural school and a local, family-owned dairy facilitated achievement-oriented and positive workplace behaviors for a student with special learning and behavioral needs (Martin & Elrod, 1989). A partnership among an institution of higher education, school districts, and community businesses fostered competitive employment opportunities for developmentally disabled, learning disabled, and behavior disordered youth in northern Utah (Curl, Hall, Chisholm, & Rule, 1991).

The establishment of school-community partnerships in rural areas does have unique problems that must be addressed before successful implementation is possible. Specific constraints in developing rural community-based supported employment options include: long distances between work sites (with limited available transportation services), limited economic diversity, and low population density (Markve, Morris, Ferrara, & Rudrud, 1992).

Therefore, it is with an acknowledgement of the spectrum of problems and issues that confront rural areas that this article offers a different, more optimistic view of implementing school-community partnerships. Specifically, this view emphasizes the resources that rural areas possess upon which a foundation can be built to develop successful partnerships. This foundation targets the partnership theme of introducing students to the world of work.
while, simultaneously, fulfilling the transition plan mandate of the Individuals with Disabilities Education Act (U.S. Congress, 1990).

Designing Rural School-Community Partnerships

Designing rural school-community partnerships must be based on a foundation built upon the advantages that rural areas possess. The following section discusses these advantages while offering examples of rural school-community partnerships that facilitate the post-secondary transition of special needs students.

Synergistic Advantages of Rural Areas

While rural areas have certain hindrances to implementing school-community partnerships for post-secondary transition training, specific advantages exist that can facilitate such linkages. Though rural areas may not have the population, economic, or physical resources of their urban or suburban counterparts, it is much easier to identify the "school community" in rural areas. If school communities are, indeed, composed of "families of children who attend [school] and their immediate neighbors" (Litwak & Meyer, 1974, p.1), then, for many rural areas, the school community is synonymous with the local community. Thus, all children in the local community attend school in the same system and that system responds to the needs of the local community. This synergistic relationship translates into an "ownership" of the rural school by citizens of the local community. It is with a synergistic perception of rural areas, therefore, that the following advantages have been identified.

Less formal politics. Rural community politics is much less formal than in metropolitan areas, thus opening up community systems to the general citizenry. These systems can provide educators with the opportunity to effect system-wide change. Local governing bodies (e.g. town councils) routinely hold open-door community meetings to enlist support for special projects or to solicit community input into the decision-making process. Through this open-door process, rural educators and advocates can solicit support for school improvement issues and school-community partnerships.

Accessibility of non-school personnel. In rural communities it is not difficult to get to know many of the individuals responsible for non-school services (e.g. the local grocer or the manager of the hardware store). Private sector and school personnel often know each other on a personal level, see each other regularly at community functions and can formulate agreements on a "hand shake" rather than formal, written contracts. When individuals attend the same churches and participate in local community activities together, the formality of maintaining the necessary contacts becomes more relaxed.

Acquaintanceship of parents. In smaller, rural communities, most parents of students with disabilities know each other. This acquaintanceship facilitates parent cooperation and advocacy which can yield considerable weight in effecting positive program initiatives such as school-community partnerships.

Rural-oriented work ethic. Rural areas are built on a
foundation of hands-on physical labor. Albeit sometimes seasonal, work is the cornerstone of the daily lives of rural families. Schedules are often set to revolve around planting, harvesting or "haying." Thus, the value of work at home, in the community, and at school is a constant theme in rural environs.

Resource identification. With a much smaller private sector on which to draw, the identification of resources to be activated in a transition plan is less time consuming. Often, as will be evidenced in an example cited below, the proprietors and patrons of rural businesses take direct "ownership" and pride in being included in school-community partnerships.

Examples of Rural School-Community Partnerships

Both rural and remote school districts have been able to implement community partnerships to facilitate the post-secondary transition of students with disabilities as evidenced in the following examples.

Skills Training Program, Union (OR) Educational Service District (ESD). The Union ESD based in La Grande, Oregon, provides regional transition training for Baker, Union, and Wallowa Counties of eastern Oregon. The mission of the Skills Training Program is "to assist students in acquiring employable skills through a coordinated effort among the school district, vocational trainer/teacher, employers, and parents (Union Educational Service District, 1991, p. 1). During the 1990-1991 school year, the Skills Training Program was able to outreach to rural and remote communities of the three-county consortium and serve 45 students. Thirty-three community sites were used as placement facilities with both public (e.g. public libraries) and private (e.g. small businesses such as Oregon Trail Bicycles) sector sites participating.

Two cases from rural Mississippi. The following descriptions of community-based programs for two students with developmental disabilities emanate from rural, eastern Mississippi.

Rhonda is a 20 year old female receiving special services under the category, "educable mentally retarded." Her transition plan focuses on the skills necessary to obtain a position at a local fast food restaurant. Some of the skills identified for successful job performance included: punctuality, attendance, appearance, attitude, use of public transportation (a mini-bus provided for the elderly and disabled), and completion of assigned tasks. Through supported employment, Rhonda was able to solidify these skills on the job, allowing for feedback from the work setting.

Because a job coach was unavailable, Rhonda's special education teacher, her case manager from Community Counseling Services, and the staff of the fast food restaurant joined forces to provide training and support on the job site until Rhonda became independent as a worker. A transition team composed of Rhonda, her mother, her case manager, her special education teacher, a representative from Vocational Rehabilitation, a vocational counselor, and the bus driver meet periodically to review her progress and assess the need for continued support. Through team meetings, service providers are able to understand and internalize
their roles in Rhonda's post-secondary transition. As Rhonda completed her first year of employment, her special education teacher/job coach gradually began to withdraw his presence on the job site to permit Community Counseling Services to assume supervisory responsibility. In the final two weeks of Rhonda's first year on the job, much of the needed "support" only amounted to occasional phone calls to the employer to verify her continued success.

Wayne is a 23 year old male with Down Syndrome. As he approached high school entry, the rural school district in which he was enrolled was faced with the issue of having only a few special students functioning at Wayne's level. A cooperative agreement was arranged among the special education, vocational education and home economics programs at the high school. When this agreement was implemented, Wayne began to receive instruction in basic laundry skills, food management, and home repairs. Upon completion of this tailored program, Wayne received training through Vocational Rehabilitation and job coaching from Community Counseling Services. Wayne was employed at a local market and his life appeared to be in order until the opening of a large supermarket caused the unforeseen closure of the local market. These events left Wayne and other former employees of the local market unemployed.

Being a resident of a small, rural community, Wayne's plight was recognized by a number of local citizens and former patrons of the local market. The local chapter of the Association for Retarded Citizens (ARC) was asked to devise a strategy to facilitate Wayne's future and continued employment. Managers of the new supermarket received constant phone calls from ARC members and the manager and patrons of the local market concerning Wayne and his misfortune. While there was a large applicant pool for positions at the new store, Wayne was hired and reported to work shortly after the store's grand opening. When asked about the ARC's response to Wayne's situation, the local chapter president replied, "We take care of our own."

Discussion

Developing rural school - community partnerships for students with disabilities is a lesson in perception. The glass may be viewed as either "half empty" or "half full." By adopting an optimistic, "half full", orientation to the advantages that do exist in rural areas, a school - community synergy emerges on which partnerships can be developed. The crux of this synergy is not facility driven, but human driven. It is based on the informal, personal, family- and work-oriented milieu of rural areas. It is characterized by a willingness to help and become involved. Often, the fate of the status of a program comes down to one person, or a collection of individuals, finding the will, the time, and the motivation to "make do." Whether based on a consortium model, as in the example from eastern Oregon, or on individual cases, as exemplified in Mississippi, rural school-community partnerships can be effectively implemented for students with disabilities. Rural educators must look past downsized physical resources in their areas and explore the wealth of human resources ready to assist, if given the opportunity. When rural special educators view a half-
filled glass, they must think "synergy" and take advantage of the human resources that are available in their communities.
References


Creativity Training-A Practical Teaching Strategy

During the past decade both regular and special educators have increasingly been challenged to integrate exceptional children into the regular classroom. Teaching strategies which foster academic achievement for special and regular education students in the same classroom are crucial for successful student integration.

Empowering exceptional children to learn more productively in the regular education classroom proposes a question of change in the traditional organization of curriculum. Mainstreaming is effective whenever regular classroom teachers are able to adapt instruction for their students, including those with mild handicaps (Madden and Slavin, 1983).

What strategies, then, might be appropriate for regular and special education students in the same educational setting? Research conducted by Jaben (1986b) with specific learning disabled students suggested creativity training might be one such strategy. Gowan (1965) theorized that creativity is a prerequisite for achievement. Baum and Owen (1988) investigated the characteristics that differentiate high ability learning disabled students from other students with learning disabilities and found creativity to be the distinguishing factor.

Gowan (1979) suggested that creativity is a prerequisite for achievement. He argued that the lack of achievement and poor motivation may be caused by deficiencies in creative ability. Jaben (1986a) found higher verbal written expression resulted from creativity training with students having specific learning disabilities. Getzels and Jackson (1962) affirmed that creative abilities are found to some extent in all people.
Guilford (1968) suggested that the best working assumption to adopt is that education can do a great deal to promote the development of individuals in the way of preparing them to perform creatively. Parnes (1963) reported that creative imagination can be deliberately developed. He asserts that like most behavior, creative activity probably represents, to some extent, many learned skills.

Torrance (1963) listed the following four basic reasons for developing creative thinking: 1) creative thinking helps maintain good mental health and enhances personality development; 2) creative thinking may lead to the acquisition of new knowledge; 3) creative thinking may help in solving daily problems; and 4) creative thinking helps people of present and future generations to survive.

Novak and Gavin (1988) suggested concept mapping is a metacognitive strategy. While concept maps can be constructed in several ways, Novak, Gowin, and Johansen (1983) theorized, "The greatest creativity may be required to construct a concept map without any supplied words or text, but drawing on an individual's fund of knowledge for some specific topic" (p. 626). Thus, concept mapping is a metacognitive strategy which allows students to integrate creative relationships between concepts.

If it has been theorized creativity is related to concept map development, would creativity training impact the concept maps developed by students? It was hypothesized in this investigation that students who were classified as either specific learning disabled, regular education, or mentally gifted who received creativity training would score significantly higher on concept mapping than those within the same classifications who received no such creativity training. The purpose, then, of this study was to investigate the effects of creativity training upon the ability to produce more complex concept maps among 5th, 6th, and 7th grade students classified as learning disabled, regular education, or mentally gifted.

Methodology

One hundred twenty students from a rural middle school in north central West Virginia participated in the investigation. The subjects were randomly selected from intact classrooms and assigned to an
experimental or control group. The groups consisted of 20 experimental and 20 control subjects for each classification of learning disabled, regular education, and gifted.

All 120 subjects were given training in concept mapping and were asked to complete a concept map as a pretest. The three experimental groups were given 10 hours of creativity training while the three control groups received no creativity training. As a posttest measure, all 120 subjects completed a second concept map.

Data Analysis & Research Findings

Data were analyzed via an Analysis of Variance procedure with repeated measures. (Insert Table 1 about here.) Results indicated subjects who received creativity training developed significantly more complex concept maps than those subjects who received no such creativity training.

Across all three ability groups, experimental subjects who received creativity training scored significantly higher than control subjects in concept mapping. Thus, creativity training enhances the concept mapping ability of regular education students as well as students who are classified as specific learning disabled or mentally gifted.

Discussion

Results from this study suggest creativity training is an effective strategy for use in the regular classroom with both regular education students and students designated as learning disabled or mentally gifted. Thus, this technique is effective with integrated students in the regular education setting.

Given the need to develop strategies to facilitate the regular education initiative, creativity training is a technique that can be employed in an integrated classroom comprising of regular education students, students with learning disabilities, and students who are classified as mentally gifted. More importantly, it may be possible to teach creativity to all three groups at the same time. Emphasis should be placed on how students learn the content and not so much on the content itself. It should be recognized that these three groups will all start at different levels and should be evaluated on the progress made within each
Table 1
Summary of Analysis of Variance With Repeated Measures for Group X Ability X Test Results

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>P&gt;F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group (A)</td>
<td>1</td>
<td>1358.50</td>
<td>1358.50</td>
<td>118.10</td>
<td>0.0001</td>
</tr>
<tr>
<td>Ability (B)</td>
<td>2</td>
<td>6130.42</td>
<td>3065.21</td>
<td>266.46</td>
<td>0.0001</td>
</tr>
<tr>
<td>A X B</td>
<td>2</td>
<td>72.16</td>
<td>86.08</td>
<td>7.48</td>
<td>0.001</td>
</tr>
<tr>
<td>Error between</td>
<td>114</td>
<td>3622.58</td>
<td>31.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test (C)</td>
<td>1</td>
<td>940.10</td>
<td>940.10</td>
<td>81.72</td>
<td>0.0001</td>
</tr>
<tr>
<td>A X C</td>
<td>1</td>
<td>840.00</td>
<td>840.00</td>
<td>73.02</td>
<td>0.0001</td>
</tr>
<tr>
<td>B X C</td>
<td>2</td>
<td>24.01</td>
<td>12.00</td>
<td>1.04</td>
<td>0.355</td>
</tr>
<tr>
<td>A X B X C</td>
<td>2</td>
<td>41.01</td>
<td>20.50</td>
<td>1.78</td>
<td>0.17</td>
</tr>
<tr>
<td>Error within</td>
<td>114</td>
<td>1311.37</td>
<td>11.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>239</td>
<td>14,440.16</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
A benefit of the creativity training intervention may be the development of metacognitive strategies as measured by concept mapping. Students were encouraged during the training to be more fluent, flexible, original, and elaborative. As the subjects developed their skills in each of these areas, they were given the opportunity to generalize their newly found ability to a tangible product. As students were encouraged to be more original, they developed creative ideas for expression that were unlike ideas from any other member of the training group.

For example, a student in the learning disability experimental group struggled with the brainstorming activity and became very frustrated when he was unable to produce a response. When prompted by the investigator that any response was acceptable and good, and that an original response was one that no one else had given, the subject gave an off the wall, but creative answer.

Two days later while working with foil, this student created a mouse and a mouse trap. When this product was shown to one of his teachers, she was astonished that he could create such an intricate product from a sheet of aluminum foil. She stated that he was the slowest and most limited child in the learning disabilities program, and she felt he should be classified as mild mentally impaired. She further stated that this child could barely read on the first grade level. Yet he was able, with prompting, to create something useful out of something not so useful by building upon the strategies taught to him in creativity training.

Summary

If indeed creativity training can impact concept mapping ability with both regular students and those students classified as mentally gifted or learning disabled, and these results are generalizable, then the argument for integrating exceptional students into the regular classroom using the same teaching strategies may have merit. Creativity training appears to be a strategy worthy of use by teachers with students in an integrated setting.
References


The New Mexico State Board of Education (SBE) established, through Regulation No. 84-6, ten regional center cooperatives across the state to provide assistance to and address the needs of the smaller/rural local education agencies (LEAs) in the implementation of the Individuals with Disabilities Education Act (IDEA) formerly the Education of the Handicapped Act (EHA). SBE Regulation 84-6 permitted New Mexico LEAs to form regional center cooperatives (RCCs) and submit consolidated applications under IDEA through the use of the Joint Powers Agreement Act (11-1-1 to 11-1-7, NMSA, 1978). Leeway was also given RCCs to serve non-member agencies and to pool other than IDEA funds through subsequent approved, multi-year Joint Powers Agreements (SDE, 1990).

The governance/management functions of the NM-RCCs were relegated to "Councils" whose membership was comprised of the local superintendents or state agency administrators of member agencies. In seven of the RCCs an LEA was assigned to serve as the fiscal agent for the RCC on behalf of member districts. In three RCCs (beginning in the 1990-1991 School Year) the RCC Councils were designated as their own Boards of Finance (SDE 1990, 1990a), but this was a temporary solution.

Statement of the Problem

After eight years of operation, the ten RCCs reported that the joint powers agreement process was cumbersome and rendered the collaborative process unwieldy at best and unworkable at worst. Concomitantly, several larger, and very vocal LEAs, which were not members of RCCs, wrote a letter of concern to the State Education Agency (SEA) criticizing the SEA and complaining that the state's discretionary funds under IDEA were primarily directed to the smaller districts when larger districts were also in need of the funding. Multiple meetings with representatives of RCCs and single LEAs did not result in any resolutions. Both sides were entrenched in their positions.

At the urging of the RCCs, the New Mexico Department of Education prepared a request for proposal (RFP) for a contractor to design, develop, and conduct a statewide study to determine (a) the scope of existing Regional Center Cooperative (RCC) services, (b) distribution of funding and (c) the feasibility of RCCs assuming the fiscal responsibilities associated with the implementation of RCC activities.

The RFP identified preferred outcomes of the study to
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include recommendations for (a) alternatives and potential services to be provided by RCCs; (b) maintenance and/or modification of existing structure/organization of RCCs; and (c) potential RCC collaborative efforts with other statewide agencies [e.g., single and member LEAs, Health and Environment Department (HED) and community non-profit training centers (NPTCs), state supported schools (SSSs), and institutions of higher education (IHE)] in addressing statewide needs (SDE, 1990,). The time-line given was originally one year. Final time-line was nine months.

Development of NM-RCC Study

In selecting a method for the study in response to the RFP, the evaluators sought a process that (a) assessed current and anticipated claims and critical issues, (b) resulted in alternative responses to the identifies issues, and (c) assured participatory decision making.

Strategic Planning for Non-Profit Agencies, adapted from Dietrich (1986, p. 6) served as the basic framework for the study. The Dietrich model offers a process for establishing a strategic fit (figure 1) between the non-profit organization (RCCs) and the environment (local, state and national governments and educational agencies) and:

1. uses existing or available data
2. can be accomplished within flexible time frames
3. is participatory
4. includes a focus on the existing agency (RCCs) as well as the outside world
5. is creative
6. results in practical outcomes

The modified strategic planning process, adapted for the NM-RCC Study, require 12 steps within three major phases (Figure 1). The 12 steps offer a structure within which interview and survey studies were to be designed and implemented with extensive involvement and negotiation with all stakeholders. Guba and Lincoln (1989, p.40) define "stakeholder" as persons or groups that are put at some risk by the study. Stakeholder includes: (a) agents, (b) beneficiaries, and (c) potential beneficiaries such as, persons or groups potentially benefitted or negatively affected by (a) the use of RCCs or (b) by a failure of the evaluators to include them in the study.
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Figure 1

Phases & Steps for Strategic Planning with Fourth Generation Principles

Step 1
Initiate Contract with Sponsor Commissioning Study
(Sponsor/Agent)

Step 2
Start Up Project
(Agent)

Step 3
Collect and Organize Available Data
Identify Stakeholders via Nomination of Peers

Step 4
Review Available & Identify Needed Data
(Agent, Subcontractors & Steering Committee)

Step 5
Draft Survey & Interview Instruments
(Agent & Subcontractors)

Step 6
Review Draft Research Instruments
with Stakeholders & Finalize
(Agent)

Step 7
Conduct Study for New Data
(Agent & Stakeholders)

Step 8
Compile Findings & Analyze
(Agent & Subcontractors)

Step 9
Formulate Options & Recommendations
(Agent, Subcontractors & Steering Committee)

Step 10
Negotiate Recommendations w/ Cost Estimates
(Agent, Stakeholders & Steering Committee)

Step 11
Develop Final Report of Findings & Recommendations
(Agent & Subcontractors)

Step 12
Close Out Project
(Sponsor/Agent)
Negotiated Evaluation

The Development Phase included the first six steps of the Negotiated Evaluation process.

Step 1: The evaluator operationalized the RFP award through an agreement with the contracting agency (agent).

The contract actually required three months to negotiate through state procedures cutting the length of time for the study from one year to nine months.

Step 2: Project start-up included appointment of a project Steering Committee and selection of expert sub-contractors to analyze data.

In the New Mexico study, the Steering Committee was comprised of representatives of stakeholder groups, nominated by members of the representative groups (i.e., RCC staff and Governing Councils, single non-member LEAs, state agencies using RCCs for services, school boards association, administrators association, parent organizations, school collaboratives not RCCs, legislative education committees, state department of education, human services department, universities’ distance education, governor’s education advisor, state IDEA panel). Nominations were sought by written request to members of the groups as well as through interviews with prominent individuals. Representative stakeholder were taken from those receiving the most nominations with consideration given to geographic representation.

The representative stakeholders were involved in the development of the questions to be asked, the design of the research instruments, and the methods to be used to gather the data (survey and interview).

The selected subcontractors were recognized in the state as (a) expert in school finance, and (b) in New Mexico school law.

Step 3: While nominations were in process, known available data was collected from: the local, state and federal level.

The available data was organized and presented with the Steering Committee membership.

Step 4: The steering Committee was convened (a) to review available data and information baselines, and (b) to identify additional data needed regarding organization (RCCs) and environment (LEAs, State, HED, SSSs, private providers, etc.).

The Steering Committee and project staff (a) defined key characteristics of data needed and potential data sources, and (b) identified additional stakeholders not already included in
Negotiated Evaluation
the steering committee. Additional stakeholder were identified by the interview question, "Who disagrees with you that might bring another point of view into the study?"

Step 5: The evaluators developed draft survey and interview instruments with a projected time frame for the study and identified stakeholder to be involved.

Step 6: Evaluators reviewed proposed research design and instruments with stakeholder groups through statewide meetings such as: Special Education Quarterly Meetings hosted by the SEA, School Boards Association, School Administrators’ Association, Developmental Disabilities Planning Council, Interagency Council under P.L. 99-457, IDEA State Advisory Panel, and state Council for Exceptional Children.

These contacts resulted in (a) revised data collection instruments, (b) proposed timeline for interview visits to regions and other stakeholder groups, and (c) proposed mailings and return dates for surveys.

With the completion of Step 6 the study entered the implementation phase.

Implementation of NM-RCC Study.

The Implementation Phase was one phase in which the major responsible parties were the project staff and agency support services.

Step 7: Activities involved travel to each of the 10 RCCs for (a) data gathering; and (b) interviews with Council members, RCC-staffs, contractors, beneficiaries, and anticipated beneficiaries.

Because of the small number of RCCs, a full census of all RCC directors and Council members was conducted. Stratified random samples were used with RCC-staff, district principals and staff, parents and other identified beneficiaries and anticipated beneficiary groups (e.g., private providers, HED, IHE).

Except for RCC descriptive and comparative data (demographic, personnel employment, and fiscal), confidentiality was granted all respondents to the questionnaires and interviews.

Data Analysis and Reporting

The Data Analysis and Reporting phase of the study contained five major steps. These steps involved project staff and subcontractors in Step 8 for the analysis of data, and the Steering Committee and identified major stakeholders in the prioritization of options (Steps 9 and 10). Development of the
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final reports for the contracting agency (Steps 11 and 12) were the responsibility of project staff and subcontractors; however, both the interpretation of findings and the recommendations were negotiated with stakeholders in state meetings prior to finalization with the steering committee.

Step 8. Analysis of data included descriptive statistics (averages, etc.), and non-parametrics (e.g., use of chi square to identify statistically significant differences between groups). Comparisons of findings were made with national findings from three national studies conducted by Fletcher, Cole, and Strumor (1988, 1990) and Fletcher (1991).

The evaluators organized findings into graphs and tables; analyzed them for statistically significant differences between groups (i.e., members of RCCs and non-members of RCCs; Professionals and parents); and compared state findings with national findings, where applicable, and developed preliminary recommendations.

Step 9: Evaluators presented findings, analyses, and proposed options to the Steering Committee, and generated additional options and recommendations.

Step 10: Evaluators and Steering Committee members presented the committees' recommendations and options to all major stakeholders for comments through conferences under the sponsorship of the SEA.

It was at these conferences and meetings that stakeholders could disagree with interpretation of findings and offer alternative interpretations and modify recommendations. Every comment was considered, and stakeholders who had the authority to veto any single recommendation with the legislature were purposefully sought out, and asked whether or not they could support the recommendation(s). If not, what they could support was garnered and taken back to the stakeholder groups for their further consideration. In all instances, the stakeholder groups supported the negotiated recommendation.

In this low populated state, talent is hard to come by and some very talented individual's were going to be negatively affected financially by the recommendations. Meetings with these individuals were also carried out so that the alternative recommendations could be discussed. With the personal consideration to their dilemma's, they assured the stakeholders that they could "live with" the recommendations. Their responses assured concurrence among groups at the 90% agreement rate.

Step 11: The negotiated findings and recommendations were prepared into a final report with recommendations for each critical issue: (a) legal organization--with a name change
Negotiated Evaluation

recommendation to better define the mission; (b) funding issues, (c) IDEA provisions, (d) potential services--required and optional, and (e) potential costs of each recommendation.

Step 12: Evaluators submitted the final report with an Administrative Summary and the nonidentifiable data collected during the study to the contracting agent. The evaluators made themselves available to discuss the report with governmental committees, administrative bodies, and other boards upon request. Copies of the Executive Summary were mailed to all stakeholders after members of the State IDEA Advisory Panel accepted the report and supported the implementation of the recommendations.

Conclusion

The application of a Negotiated Evaluation process gave stakeholders throughout a geographically large, but sparsely populated state an involvement in an evaluation whose outcome could impact them either positively or negatively as an organization or as an individual. That involvement included the development of the questions to be answered, stakeholders to be involved from all sides of the issue, and negotiations of the interpretation of the findings and ultimate recommendations. Rumors were kept to a minimum for all activities occurred in public forums. Outcomes were acceptable to 90 percent or more of the stakeholders across stratified groups and individuals impacted negatively were made aware of the reasons for the recommendations and given opportunities to minimize the negative effects.

Potential for change was greatly enhanced by the full inclusion of stakeholders. Turf maintenance and political ideologies, so prevalent in rural states, were purposefully incorporated into the design rather than skirted by the evaluators. This negotiated evaluation model provided a system for educational program evaluation that is flexible in timeline; easily replicable; and can be adapted to address the formative and summative evaluations of programs serving populations at-risk, children with disabilities, bilingual programs, and other emerging issues highly charged with "turfisms."

This particular Negotiated Evaluation process resulted in desired legislation which two years after the study established through statute Regional Educational Cooperatives (Article 2B, Regional Cooperative Education, NMSA 1976 as amended 1993).
Negotiated Evaluation

References


MA, PA, SCHOOL FOLKS AND KIDS: WORKING A PATCHWORK TO A COMPLETE "HEART"

I. Introduction:
Tumultuous societal change has a habit of creating educational frontiers for workers in the "trenches." Long before documented studies have their say, master teachers can often tell us how children are changing and what they need. With the breakdown of the family in today's society, both children and families need to be involved if education is to have meaning and application in real life. Since there are no "experts" in living life, educators must be willing to be people first, unwilling to hide behind a role as an educational "expert." New frontiers require new visions: our vision is that of developing the "Hearts" of children in ways which are personally empowering. This article offers the story of our practical experience, documentation limited to our own school, and the hope of encouraging others to record their own experiences with working a patchwork to a complete "Heart."

II. Purpose of Presentation:
Collaboration between regular and special education has always posed special challenges. Children today are dealing not only with learning problems, but with devastating abuses which threaten to become the norm. We present a team approach to helping children develop and apply coping skills for school, home, and community. "Developing the Hearts of Children" (Copyright by Laurie Fedje, 1992) is a social skills curriculum which we use for collaborating in regular classrooms. The "Heart" curriculum consists of a discussion, problem solving, drawing assignment, and written language approach to helping children learn responsible behaviors and gain life independence. Our team draws in our social worker, counselor, principal, and parents as facilitators to help students cope with poverty, social problems, and classroom expectations. Problems which generate feelings of helplessness and acute stress for our staff can be shared with families who help carry the load and help develop options. As the team becomes more comfortable with teaching to the
Rationale:

1. Why Do We Mean By “Heart?”

“Heart” refers to the mind, will, and emotions—to the deepest, most inner part of a person. “Heart” has been used to mean “the seat of life or strength.” “Heart” can also mean mind, soul, spirit, or one’s entire emotional nature and understanding. Attitudes developed in the “Heart” form the basis for learning, interaction, and for dealing with life.

2. Why Do We Deal With the “Heart?”

Personal change comes from within and is motivated by the desire to find and develop the unique “self,” not from external manipulation of events or conditions. Educators can be powerful people who manipulate the school environment to reach goals which they feel are important. Programs such as “Learn to Earn” pay children for doing their school work, but neglect the most powerful tool at hand: personal empowerment through developing the identity of children. We let children and families know we think they are capable of solving their problems, that we can learn from their experiences, and that we hope to develop the home/school relationship which will lead to success.

A complete “Heart” will continue to contribute to others long after the manipulations of external rewards by powerful educators are gone. Failure to develop the “Heart” results in the failure to empower children through personal, living education (education used in life). Educators must recognize that we may provide our children the last hope for normal “attachment” to others, and that the time spent in preparing a “Heart” is not lost, but is an immeasurable investment.

3. What Do We Hope to Gain Through our “Heart” program?

Personal empowerment takes place in person to person interaction, and is practiced in real life situations. School and home responsibilities are important. We hope to help students and families develop attitudes which are personally empowering.

We hope to see students develop: a strong sense of self, responsible behaviors leading to behavioral and academic excellence, the self discipline necessary to achieve their own goals, honest communication, positive friendships, and the desire to share with and contribute to the group. We hope to see students who have emotional problems gain control and remain in the least restrictive school setting. We hope to help school staff share and contribute in personal ways which build community, lessen stress, and encourage academic excellence. We hope to see families sharing with school through commitment to friendship, partnership, strong family ties, and an involved community.

III. Project Description:

First Essential, Common Goals: At Sagewood Elementary, school staff involved with developing the “Hearts” of children are in agreement regarding program goals
and methods. We believe that the team needs each other in order to meet the needs of students; we also believe students and families can solve their own problems but mutual support can benefit all. The seemingly abstract concepts can be accomplished in some very concrete ways. We follow a written curriculum but it is only a guide to facilitate work which meets the needs of the group in developing personal identity and establishing positive relationships.

* See Appendix A: Overview of Curriculum Goals and Concepts

Structure:
The “Heart” concepts are taught on a daily basis in the resource classroom and on a weekly basis in the regular classrooms. The classroom teacher and the resource teacher team during class meetings to present target concepts. The principal, social worker, counselor, paraprofessionals, and playground staff help facilitate small group discussion as available. Concepts are then developed into an appropriate topic sentence for paragraph/theme writing or a topic for a drawing assignment. Family members are welcome to sit in on the sessions, but can only facilitate if they have been trained by staff. Our objective is to involve as many people as possible in offering choices to children and in helping them to make the most positive choices for themselves. Our approach continually comes back to simple concepts: “What do you need? What do you choose to do? What do you have to offer?” Each student carries the responsibility for choices made, yet has the right to begin each day (or each class) as a new chance for success. We have seen a very powerful community develop out of our structured communication and writings.

A suggested progression is:
1. Overview Goals and Concepts: Identify target areas.
2. Group Discussion of Concepts and Selected Topic Sentences
3. Drawing Assignments: Useful for developing ideas, to relieve stress, anxiety
4. Writing Assignments: Paragraph writing, theme development
5. Student Self Checking: Am I growing as a person and as a student?

IV. Rural Focus:
I have learned from the Navajo people in rural New Mexico that strong personal and family “identity” can be the foundation for an empowered lifestyle which can overcome all odds. This has become the basis for “Heart.” School and family partnerships can help make the most of dwindling resources while meeting the needs of students. If we are to meet their needs, we must begin to ask questions and listen to the families whom we serve. When we listen, we team in empowering students to become “invested” in our school. Through Family Night Activities in which students teach skills to their families, we build a basis for sharing and learning about each other. Parents and school staff have become closer as everyone works to help children refine the identity and purpose which has long been a part of rural living: “We are on our own, but we are not alone.”

* See Appendix B, for a description of “Attitudes of the Heart”
V. Data: Teachers have been open to integration which results in a less stressful classroom environment. Our problem solving and steps to self control have become part of our school discipline program. We have learned that:

1. Less control is more control; respect given is respect returned.
2. Given the tools, all students can achieve.
3. Pride in achievement becomes internalized as students meet their own goals.
4. Goals are reached by personal choice, not by external pressure.
5. Group problem solving helps students build relationships, achieve academically, prevent negative choices, and take control of their life.

Student Outcomes at My Home School:
* See Appendix C: “Heart” Program Review

CASE STUDY: KJ
In January of 1993, KJ came from Pennsylvania to live with his father in Casper (divorced from KJ’s mom 8 years earlier). A 5th grader, KJ’s school placement had been a self contained class for students with emotional problems. He had recently been placed in a mental institute for evaluation. Because KJ was so out of control, his mother and her boyfriend drove him to Wyoming to live with his father. KJ was placed in my classroom by the special request of his stepmother, who is a special education consultant in Casper. KJ was with us for 2 weeks when his mother was murdered by her boyfriend back in Pennsylvania. KJ attended the funeral with his father and then had to work to settle into a new life in Wyoming, with no hope of escape.

KJ’s IQ is within the normal range, with a 26 point spread between verbal and performance, the latter being the strongest suit. He was functioning well below grade level when given pretests in January. (See KJ’s Pre/Post test scores, Appendix C: Heart Program Review). Entrance level behaviors included screaming profanities, head banging on the walls, attacking students, refusal to work, destroying his work, refusal to come in from recess, and refusal to comply with authority. KJ’s family was able to communicate with us on a daily basis, and they also did constant problem solving with KJ to help him see “a new way of dealing with life.” We worked together to develop KJ’s Heart, always dealing with him in the spirit of the law (using common sense!) rather than the letter of the law.

KJ has progressed in one year’s time to being mainstreamed in all classes except written language. He has successfully played on a basketball team for the first time in his life. He has written, produced, and presented stories on our Sage TV
productions. KJ has been able to maintain friendships, take orders, complete classwork and homework, ask for help, and visit over problems to find solutions. Steps to self control used to be an hourly occurrence for KJ, now it is a rare occasion when he is not calm enough to problem solve. KJ’s family reports he is much more fun to be around now; his stepmother says she no longer dreads weekends at home. There is still room for growth, but KJ is now able to follow a new path and enjoy sharing life with others.

VI. Practical Applications:
Our strategies can be used by anyone willing to talk with students and families about important life and school issues. Teachers can apply our program through written language assignments, journal writing, drawing assignments, problem solving and thinking skills development, and practice in verbal expression, group discussion, and role playing. Our straightforward approach has been used by teachers because it is simple and addresses problems which otherwise are not confronted. When planning your program, simply address the following questions:

1. What do the students need to function better as students? As people?
2. What do I need to be comfortable in this classroom?
3. Who do I need to be on my “team?” Who is willing? Who is able?
   (Consider families, staff)
4. In which of the goal areas is there a block to effective learning right now?
5. How much time will I devote to these goals? Will my methods include discussion, writing, drawing, or my own combination of work?

VII. Conclusion: Classrooms develop into a place of support as students work together to develop identity, solve personal problems, and make academic gains. Students learn to contribute to others, to their families, and to their communities.

My “Heart” has shown me that I need others. I have learned that the contribution people make to my life is a precious gift to be guarded and nurtured. I have also learned the most important lesson of my teaching career: We are unique and have but ourselves to offer, but it is everything that we are and all that we have, and we are of worth.
Appendix A, Overview of Curriculum Goals and Concepts:
(Includes a Sample Topic Sentence and Drawing Assignment for each Goal Area)

1. Responsibility:
* Responsibility: a job or duty I must do.
* Independent Behavior: a task I can do for myself by myself.
* Dependent Behavior: Tasks I make others do for me that I could do for myself.
* People in Authority have the responsibility to see that their job is carried out, and they have the right to be obeyed.
* Freedom is the right of each person to do what he wants, unless it interferes with the rights of others.
Sample Topic Sentence: I am a master at several independent behaviors (at home, at school).
Sample Drawing Assignment: Blaming is not an option, but I tried!

2. Attitudes:
* Attitudes refer to thoughts, feelings, or ideas about life situations (positive or negative).
Sample Topic Sentence: Explain: “A positive attitude builds up, a negative attitude tears down.”
Sample Drawing Assignment: Feeling Unloved, Hiding Behind a Bad Attitude.

3. Self Awareness:
* Self Awareness is knowing myself and being honest with myself.
Sample Topic Sentence: When I think about my behavior this past week, I can see both strengths and weaknesses.
Sample Drawing Assignment: Things About Me That I Really Like

4. Self Esteem:
* Self esteem is how I feel about myself (positive and negative).
* A sense of accomplishment is the feeling we experience when we complete a goal we have set for ourselves--a goal which is personally important to us.
Sample Topic Sentence: I’d like to write about what really makes me feel like trying harder than ever (at home, at school).
Sample Drawing Assignment: Times When I Should Feel Bad About My Behavior!

5. Self Discipline:
* Self Discipline is training yourself, rather than making others try to train you.
Sample Topic Sentence: I will describe how being unable to control my anger makes me feel.
Sample Drawing Assignment: Working Toward A Goal I’d Like To Reach
6. Communication:
*Good Communication consists of talking, listening, sharing, and asking for help.
Sample Topic Sentence: Sometimes I'm so frustrated that I just throw a fit instead of asking for help!
Sample Drawing Assignment: Asking for Help Because I Want To Change

7. Friendship:
* All of us need people with whom to share our lives and experiences.
Sample Topic Sentence: There are times when it's not right to be loyal to a friend--and it's important to know the difference.
Sample Drawing Assignment: The Good Heart: The Inside of a Kind Friend

8. Problem Solving:
* Choice: I have the power to choose positive or negative behaviors for myself.
* Consequence: What happens to me as a direct result of my choices.

* Steps to Self Control: (For when I am too angry / frustrated to problem solve)
1. Tell what you feel:  “I feel: ________________.”
2. Tell what you need:  “I need ________________”
3. Tell what you will do:  “I will ________________.”

* Steps to Problem Solving: (for when I am ready to think and to choose)
1. What is the problem?
2. What are the choices?
3. What are the consequences?
4. What do you choose to do?
5. How do you feel about your choice?

Sample Topic Sentence: I can only control my own behavior---I can't control other people's choices.
Sample Drawing Assignment: Trapped Like a Rat! and No One to Help Me!

* Student Self Rating: (Sample from Goal 7, Friendship)
Am I building friendships?
Am I becoming someone others like to be around?
Have I learned not to manipulate people?
Have I learned not to let others manipulate me?
Appendix B, Attitudes of the "Heart:"

**H: HERITAGE.** Heritage involves who we are: yesterday, today, and who we will be tomorrow. Heritage deals with who we are as individuals, as families, as clans, or as nations. Heritage involves believing we have a tomorrow even if yesterday was not so great. Heritage involves taking steps to get to our tomorrow and allowing others to help us. Heritage involves bringing along the good from the past but also acknowledges the effects of the negative upon our lives. Heritage asks: "Where have I come from? Where do I want to go? How will this affect my people? What kind of people do I admire? What kind of people can help me discover myself more fully? Can I contribute to the search other people are experiencing?" Heritage says: "I am unique and have but myself to offer, but it is everything that I am and all that I have, and I am of worth."

**E: ESTEEM.** Esteem involves esteem for ourselves, others, our belief system, and the earth's resources. Esteem involves respecting myself enough to make positive choices for my life. Esteem involves treating myself and others with respect for their physical, emotional, and spiritual person. Esteem involves respecting my elders and learning about their lives and their ways. Esteem involves learning about my spiritual heritage and deciding how these values affect my life today. Esteem involves our communication by impacting the physical, mental, emotional, and spiritual person of others. Esteem is enhanced by the clear conscience which arises from gentle and considerate respect for the personal freedom of others.

**A: AWARENESS.** Awareness involves being aware of ourselves (our own unique personhood), others (our interactions and our needs), and the real world (not the world we wish was out there, but the real world in all its harshness and beauty). Awareness involves designing goals for personal character development. Awareness asks: "What kind of person am I? What kind of person do I want to be? What is important to me? What kind of life do I want to have? Is it true that my goals are mine alone and do not have to be like anyone else's? How does this affect my place in the family and among my people?" Awareness says: "There are experiences which only I can create in my life. How can I create within this real world, and among the ways of my people, a lasting reality which will build my "Heart" and my life? I must live with what I choose to do or not do, with what I choose to contribute or to not contribute.

**R: RISK TAKING and READINESS:** Becoming ready to interact, learn, work, play, and discipline ourselves involves a certain amount of risk taking. We take risks when we learn and when we care about others. We become ready to build our lives by interacting, learning, working, playing, and disciplining ourselves. Risk Taking and Readiness says: My risks may be different from the risks other people face. My readiness and my timing may also be different from that of others. The important thing is that I become ready, that I take risks, in ways which complement the person I am because of the values I possess. I have the freedom to develop in my own ways. I will develop the confidence to design my own goals and to follow my own paths.

**T: TRUTH:** Truth involves seeking to fulfill the desire placed in all of us for truth and meaning in our lives. Truth involves living our lives on a deeper level, seeking excellence in our lives, becoming an individual, feeling unique. Truth can't be replicated, given, or passed down--truth can only be experienced. If the Heart is considered to be the seat of life or strength, then Truth must be the filling of the Heart. Truth fills our Heart and from this strength and this source we will live out our lives. Truth says: To find me you must seek me with all your Heart. A full Heart will be able to survive this life, to touch other lives, and to be a contributor rather than a taker.

### Appendix C: “Heart” Program Review

Sagewood Elementary, Casper, Wyoming

By Laurie Fedje, Copyright, January 1994

**DOCUMENTATION:** Skills Gains by outgoing 6th Graders
Woodcock Johnson Test of Achievement, Age Norms, Grade Level Entry / Exit Scores

<table>
<thead>
<tr>
<th>Code Name/ Disability</th>
<th>Time in Program</th>
<th>Subject</th>
<th>Grade Level Entry / Exit Scores</th>
<th># Resource Classes in JHS</th>
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<tr>
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<td>Language</td>
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<td>0 / 7</td>
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<tr>
<td></td>
<td></td>
<td>Language</td>
<td>3.6--5.4</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Math</td>
<td>3.8--5.8</td>
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<tr>
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<td>4/7</td>
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<tr>
<td></td>
<td></td>
<td>Language</td>
<td>3.0--3.8</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Math</td>
<td>2.8--3.0</td>
<td></td>
</tr>
<tr>
<td>Ak (ED/LD)</td>
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<td>Reading</td>
<td>3.3--4.2</td>
<td>3/7</td>
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<tr>
<td></td>
<td></td>
<td>Language</td>
<td>3.2--5.1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Math</td>
<td>4.0--5.4</td>
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<tr>
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<td></td>
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<td>Math</td>
<td>4.9--6.3</td>
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<tr>
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<td>Subject</td>
<td>Grade Level: Entry / Exit</td>
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<td>5.6–7.0</td>
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<td>Math</td>
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<td></td>
<td></td>
<td>Math</td>
<td>4.5–8.7</td>
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**Language**: Writing Sample Scores  
**Reading**: Pass. Comp. Sc.  
**Math**: Applied Problem Sc.

At this point we have documented only resource students gains in academic achievement and independence (being phased into and passing regular education classes). This year we are beginning to document the impact on regular class students as well. The impact of “Heart” on personal empowerment as judged by the number of resource classes students take in junior high school is as follows: 62% = 1 resource class, 7.6% = no resource class, 7.6% = 2 resource classes, 7.6% = 3 resource classes, 7.6% = 4 resource classes, and 7.6% = residential setting. Although many factors influence success, parent feedback credits “Heart” with helping children to become responsible in making good choices in junior high school.
Special Education Administrator Training: Meeting Market Needs Through Collaboration in Northern New England

Purpose of Presentation

Until recently, educational administrator training programs with a focus on special education were not offered by faculty at colleges and universities in Northern New England (e.g., New Hampshire, Maine, and Vermont). In June, 1990, though, the Joint Master’s Degree Program in Special Education Administration was established by a coalition of Gallaudet University from Washington, D.C., Plymouth State College and Keene State College (both members of the University of New Hampshire System).

The initial intent of the faculty in this program was to provide basic leadership training in special education as a response to needs espoused by local school district directors of special education and special education teachers. The participation of Gallaudet University in this endeavor was to assure a concentration on sensory disabilities such as deafness and blindness (areas of study in rural New England, and elsewhere, for which there is limited access, knowledge, and expertise) and on special education administration topics.

Our intended purpose in this paper is to discuss the process of establishing a new program based upon marketing data and to tell how marketing and course evaluation data as well as other factors coalesced to suggest that the new master’s degree program needed to be expanded to meet more accurately the training needs of current holders of master’s degrees presently serving as directors of special education, school building coordinators of special education, and master teachers. It, further, is our purpose to describe the process of planning and consultation used by program faculty with local directors of special education in New Hampshire and Maine in order to forge an advanced set of training experiences. The intent of this multi-state collaboration has been (and continues to be) to share knowledge about administrator training needs and positive leadership practices.

The result of all of this activity, including the participation of New Hampshire’s Director of Special Education in implementing a broader based program planning and training process, is for state leadership and local leadership to be more effective in meeting educational needs. To do this, in part, Plymouth State College was awarded a state grant to support a series of summer leadership training institutes and to design a Certificate of Advanced Graduate Study Program (CAGS) in Educational Leadership. One specialty area in the new CAGS effort will be special education and its fit with other areas of education.
Rural Character of Northern New England

The unique aspect of this effort has been a focus on rural education and on addressing regional training needs that have been expressed by local school personnel in mostly very rural locales. The benefit for prospective students is the direct contact that program faculty have with practitioners and advocates who have to address the daily challenges brought about by the needs of children with disabilities and their families, special education, generally, school inclusion and other important changes in special education, and the rapidly changing demographics of schooling in rural locales.

New Hampshire, Maine, and Vermont are the northernmost states in the eastern part of the United States, and, together, form the region sometimes known as Northern New England which is at the beginning of the Appalachian Trail. There is a unique character to this region of the country as evidenced by its rugged terrain, including mountains, lakes, and the sea, the independence of the people, and the ability of these people to forge a way of life, a proud history, and a set of noble traditions and lore from the land and area in which they live. If anything, there is a calm appreciation by the people of Northern New England to that which is thought about by most other people as being small.

In New England, and especially in Northern New England, one understands (or comes to understand if one is from "away") the value of those resources that are close by. One understands how to use local and regional resources in order to do what one does better. This precept of New England life led to the original assessment by Plymouth State and Keene State faculty members of the needs of those people who wanted leadership and administrative training, rather than on relying on training needs that had been specified elsewhere such as in national reports (say from the National Association of State Directors of Special Education, the Council for Exceptional Children, and the U.S. Office of Special Education Programs), or in the national special education literature.

Original Training Needs and the Original Program

It was the perspective of the faculty of the three institutions to establish a program that was responsive to the needs expressed by potential graduate students in the marketplace. In discussions with members of the New Hampshire special education administrators professional group, training needs in a number of different areas of special education and administration were deemed to be needed. The course of study that was established in this mostly summers only program held at Plymouth State in Plymouth, New Hampshire consisted of:
At the end of the first summer, several students who were enrolled in the program discussed the idea of having an even more advanced program, a program in which students who held master's degrees in education could enroll. Their point was that another master's degree would not necessarily be an asset professionally in terms of their intellectual or professional advancement or increasing the salaries they were receiving. Further, they were not necessarily interested in getting a doctoral degree as their intent was on continuing to work in local school districts in administrative positions in which a doctorate was not required. And, the only doctoral program in education in New Hampshire (the home state of most of the students) was not really geared toward their interests, and the faculty in that program accepted very few students each year, most being from out-of-state.

Thinking and Understanding the "Market" in Higher Education

During the second, third, and fourth summers the members of the Joint Gallaudet, Plymouth State, and Keene State Program Advisory Committee (consisting of faculty from the three participating institutions, a student enrolled in the program, and a local director of special education) began to discuss the idea of the "Market" for the present program, and a means of determining the marketplace for a different, more advanced program. Further, the idea of thinking about the marketplace was to discover ways to "sell" the program to a critical mass of students that would assure dependable numbers of prospective students from one year to the next. There were two problems with the original program. First, there was low enrollment due to the poor economic situation in Northern New England. Second, the program, perhaps any program in higher education today, requires an active marketing effort to reach as many people as possible. Limited marketing strategies do not seem to be effective. For example, advertisements need to appear continuously in newspapers and professional journals, displays are required at conferences and meetings, the original target group for potential students needs to be expanded; in other words, time, money, and energy needs to be expended in order to offer a program that has a long life. Most importantly, though, academic offerings need to reflect the needs of those who are to be trained, as well as other groups of people who have a stake or share in professional development, for example, advocates, parents, etc. Given the knowledge gained through our errors and growth, we discussed different marketing possibilities.
At first, there was an attempt at arriving at a quick solution. Gallaudet faculty offer a Specialist Program in Educational Supervision. However, the logistics of having students from Northern New England enroll in the program and, then, have Gallaudet University Faculty who lead this program come to New Hampshire each Summer proved to be too difficult. Another, more lasting, solution, then, was sought. It was clear from all that had been learned that Plymouth State would take on lead responsibility for this effort in concert with these other constituent groups.

Three of the members of the Advisory Committee of the Joint Masters Degree Program contacted the New Hampshire Special Education Directors Association to find out the level of interest of members (and others) for a Certificate of Advanced Graduate Studies Program (CAGS) since there was keen interest expressed previously by some of the members for a CAGS program. At that point, then, in 1992, Plymouth Faculty contacted the State Department of Education to determine if there was an interest in providing some support for this kind of program. The State Director of Special Education expressed his support. Yet, the establishment of a program of studies and obtaining support from the appropriate state higher education organizations to ratify new degree programs takes time. An interim step was needed in order to: a) continue to obtain data about training needs from the market of special education directors, teachers, related service personnel, and others; and, b) firm-up that interest with training opportunities, a whetting of the appetite, in which the focus would be on current topics of importance in educational administration and special education.

"Hot" Topics and the State of Maine

Fortunately, the members of the special education directors association in Maine have had about 10 years of experience in working with the Maine Department of Education and its State Director of Special Education on assessing needs and in developing training programs. The Maine group is very active.

Due to Maine’s proximity, these experiences were thought of as being beneficial to those in New Hampshire who were trying to develop the CAGS and other training programs. Invitations were obtained for several New Hampshire school district directors of special education and faculty members from Plymouth State to attend and participate in the Maine, 1993 summer training institute.

According to Harriman, Renew, Abramson, and Walls (1993, "Perspectives on Training Needs for Directors of Special Education," Presented at the 16th Annual TED Conference, Orlando) in years previous to this, the Maine directors of special education conducted their own assessment of training needs through the "Administrator Needs Assessment Profile (ANAP)." And, this past Fall, the ANAP was administered to local
special education directors in New Hampshire and to a group of parents from Maine and Massachusetts (an assessment of New Hampshire parents is now underway). Thirteen (13) special education task areas were identified and their degree of importance was specified by the respondents. These competency areas, or administrative task areas, and their degree of importance to each group are as follows:

<table>
<thead>
<tr>
<th>SPED DIRECTORS</th>
<th>PARENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 Community Relations</td>
<td>7</td>
</tr>
<tr>
<td>2 School Finance &amp; Budgeting</td>
<td>12</td>
</tr>
<tr>
<td>11 Supervision &amp; Evaluation of Personnel</td>
<td>4</td>
</tr>
<tr>
<td>6 Federal &amp; State Civil Rights &amp; Education Laws</td>
<td>1</td>
</tr>
<tr>
<td>7 Organization &amp; Planning</td>
<td>9</td>
</tr>
<tr>
<td>4 Educational Leadership</td>
<td>5</td>
</tr>
<tr>
<td>10 Educational Philosophy &amp; Theory</td>
<td>11</td>
</tr>
<tr>
<td>9 Effective Instruction</td>
<td>10</td>
</tr>
<tr>
<td>13 Curriculum Development</td>
<td>6</td>
</tr>
<tr>
<td>3 Staff Development</td>
<td>3</td>
</tr>
<tr>
<td>5 Teaching Exceptional Students</td>
<td>8</td>
</tr>
<tr>
<td>8 Learning &amp; the Learning Process</td>
<td>2</td>
</tr>
<tr>
<td>1 Employment Equity</td>
<td>13</td>
</tr>
</tbody>
</table>

This data, combined with data from course evaluations, from meetings with special education directors, teachers, and others becomes, then, the focal point for the development of the CAGS Program. Thus, the "marketplace" has been listened to and the members of the marketplace are being respected.

Present Efforts

While the "marketplace" has spoken about what is needed in training and the kind of training program to provide, the task of designing the CAGS Program and other training activities has not been completed. Now, a group consisting of Plymouth State faculty members and local directors of special education, the Special Education Leadership Institute Advanced Degree Work Group, will be engaged for the next several months in designing a course of study, developing a marketing plan, writing proposals to elicit external financial support, and obtaining approvals in New Hampshire for the new CAGS Program.

Several exciting training options being planned. First, a concentration of study in special education is being developed to be a part of the Plymouth State master's degree program in educational administration. Second, a leadership institute will be held this summer with the theme being "Leadership: A Shared Vision." Third, a comprehensive professional development plan is being developed by the administrators with a focus on designing a state certification that can be fulfilled by completing the CAGS. The joint effort to serve the marketplace seems to be successful.
Master of Education Degree: Special Education Administration

**PROGRAM OF STUDY**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Campus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philosophy and Education (ED 501)</td>
<td>3</td>
<td>PSC</td>
</tr>
<tr>
<td>Research Design (ED 503)</td>
<td>3</td>
<td>PSC</td>
</tr>
<tr>
<td>School Supervision (ED 562)</td>
<td>3</td>
<td>PSC</td>
</tr>
<tr>
<td>Theories of Learning and Cognitive Development (ED 636)</td>
<td>3</td>
<td>PSC</td>
</tr>
<tr>
<td>Organizational Leadership (EDEA 620)</td>
<td>3</td>
<td>KSC</td>
</tr>
<tr>
<td>Curriculum Development (EDCI 604)</td>
<td>3</td>
<td>KSC</td>
</tr>
<tr>
<td>School Law (EDEA 621)</td>
<td>3</td>
<td>KSC</td>
</tr>
<tr>
<td>School Budgeting (EDEA 624)</td>
<td>2</td>
<td>KSC</td>
</tr>
<tr>
<td>The Management of Writing for Administrators (ADM 796)</td>
<td>2</td>
<td>GAL</td>
</tr>
<tr>
<td>Public Policy and the Handicapped (ADM 810)</td>
<td>3</td>
<td>GAL</td>
</tr>
<tr>
<td>Issues in the Organization and Administration of Programs for Special Populations (ADM 821)</td>
<td>3</td>
<td>GAL</td>
</tr>
<tr>
<td>Teacher Evaluation (ADM 858)</td>
<td>3</td>
<td>GAL</td>
</tr>
<tr>
<td>Practica (home site, academic years)</td>
<td>3</td>
<td>PSC/KSC/GAL</td>
</tr>
<tr>
<td>Approved Graduate Elective or Thesis Option</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Total credits in program</td>
<td>40</td>
<td></td>
</tr>
</tbody>
</table>

*A student lacking recent coursework in special education may be required to take a 3 credit course Educational Programs for Exceptional Children.*  (SPED 600)

^All students without previous training in sign language will be required to take two 2 credit courses in American Sign Language.  (SPED 285, 286)

#An additional practicum in the area of the school principalship will be required of those who wish certification in that area.  (ED 607)

%Course substitutions, such as comparable courses taught on one of the three campuses, may be used with approval.

*Multicultural competencies are built into all coursework.*
In 1967, the Office of Economic Opportunities created the High School Equivalency Program (H.E.P.) to help migrant and seasonal farmworkers improve their lives. The H.E.P. program started as a pilot project at Catholic University in Washington, D.C., in 1964. The pilot program was to examine the sorts of experiences that would help these people improve their lives economically. Previous programs dealt with employment problems and providing maintenance income during periods of seasonal unemployment. H.E.P. was a pilot plan to provide permanent solutions to the employment problem of seasonal farmworkers. Using the GED program as the centerpiece of the H.E.P. experiment, the projects became a positive blend of education, social, personal, civic, career, and cultural experiences (Bertoglio, 1985). Beginning in 1968, twelve projects were funded in the form of grants. Today there are 21 H.E.P. programs in the continental USA and Puerto Rico.

H.E.P. Sites

Quachita Baptist University
Arkadelphia, Arkansas

University of Colorado
Boulder, Colorado

University of S. Florida
Tampa, Florida

Boise State University
Boise, Idaho

Center For Human Service
Bethesda, Maryland

Mississippi Valley State University
Itta Bena, Mississippi

University of New Mexico
Albuquerque, New Mexico
All programs are designed to assist the needs of local migrant and seasonal farmworkers. Funding for the programs is granted to institutions of higher education and non-profit organizations through the Office of Migrant Education. Grantees are encouraged to be flexible and creative in the development of their specific program. A very creative and flexible program is needed to serve a hard-to-reach population such as this. Most of the students either reside near their farm work or migrate with the seasonal
farm work. They are often isolated and lack transportation. Just trying to reach them is a difficult task in and of itself. Recruitment then becomes the next difficult task. Clearly stated guidelines are to be followed in the recruitment of eligible participants.

1. A person must be a migrant farmworker or other seasonal farmworker or a dependent of a migrant farmworker or other seasonal farmworker.

2. Not be currently enrolled in an elementary or secondary school.

3. Not have earned a secondary school diploma or equivalent.

4. Be above the age of compulsory school attendance in the state where the site is located.

5. Be determined by the project to need the academic and supporting services and financial assistance provided by the project in order to attain the equivalent of a secondary school diploma and to gain employment or be placed in an IHE or other post-secondary education/training program.

6. Presently participating under Chapter I of part D of Elementary and Secondary Education Act of 1965 or section 402 of JTPA.

The minimal guidelines for entry into the H.E.P. program are:

1. 6.2 on TABE (Test for Adult Basic Education) or 7.2 on ABEL test.

2. No high school diploma/not enrolled in high school.

3. 75 days employment in last 24 months.

4. Show need for service.

In general, the High School Equivalency offers the following services:

1. Assistance in enrolling in the program.

2. Instructional services in Reading, Essay Writing, Math, Science, and Social Studies geared to the attainment of a GED certificate.

3. Career counseling designed to acquaint the students with the range of career options available to them.
4. Social and cultural services designed to give the students exposure to academic institutions and programs, cultural events and other social and recreational activities.

5. Other support services necessary to help students to succeed in the program including stipends per attendance day to help with transportation.

The University of Tennessee H.E.P. was first funded by the U.S. Department of Education in 1982. The program has been refunded every year since then. For the first four years it was a residency program. Migrant and seasonal farmworker high school dropouts were brought to the University and provided with the instruction and support services necessary to complete the requirements for a high school equivalency diploma. The theory used in locating the program on a college campus was to provide a realistic environment for the successful students to continue their education by enrolling at an institution of higher education. All the services accorded the college students were available to the H.E.P. students. Active campus living was encouraged to further develop a comfortable environment further removed from the rural isolation of the seasonal and migrant farm work. To further encourage the students to complete the H.E.P. program, the Office of Migrant Education developed a sister program, the College Assisted Migrant Program (C.A.M.P.). This program was created to support a H.E.P. graduate to enroll and attend a college for the first year and then help them find further assistance for the remaining three years. Six C.A.M.P. programs are in existence now.

CAMP Sites

California State University-Fresno
Fresno, California

California State University-Sacramento
Sacramento, California

Boise State University
Boise, Idaho

Oregon State University
Corvallis, Oregon

Pennsylvania State University
State College, Pennsylvania

St Edward's University
Austin, Texas
In the grant year 1986-87 the residency program at the University of Tennessee was changed to a site based operation. Although the campus based program was successful, we believed more students could be reached if we moved out to be near the students. We also believed we could assist more married couples and thus work with a wider age range. Most students attending the campus program were young with a somewhat greater freedom to leave the work sites. However, the students had to leave the nuclear family and extended family and become residential students. With limited transportation available and difficulty in establishing mail and telephone service, the at-risk student was isolated from the family. In some situations it meant that husbands and wives were separated from each other and/or the children.

Studies clearly show that family involvement in the schools increases student attendance and achievement and home-school communication between the student, the parent, and the school further increases achievement (Gotts, 1989). Research by Epstein (1992) identified six areas of common responsibilities for learning between school, families, and communities: (1) Health, safety, and developmental issues; (2) Home-school communications; (3) Working together at school; (4) Supporting study at home; (5) Sharing decisions about education; (6) Collaboration with communities. Research also shows this family and community involvement is of even greater value to the adult learner. Emotional support, economic support, and self worth is most important as coming from the extended family (Popenoe, 1990; Blood and Blood, 1978).

Family support is especially important to the migrant student who is coping with constant movement and trying living conditions (Sunderlin, 1971; Purkey, 1970). Whereas the middle class culture can permit the children and young adults to defer the immediate successes because of a predictable income, the seasonal farmworkers and migrants cannot. This environment does not allow for risk taking in the family attempts at advancement (Fullerton, 1977). This risk taking is especially true for the female in the Hispanic culture. She is described as more passive, vulnerable and protected more than boys (Cavenaugh and Porteous, 1977). Also families from a low socioeconomic status expect less of themselves and teachers often times do too (Trowbridge and Trowbridge, 1972). The present H.E.P. program allows us to successfully make inroads to these problems. The communities served by the program are enriched by the services provided and the quality of life of the
student participating has improved.

Now that the H.E.P. is site based, further program changes could be made. Previously students enrolled for two semesters to complete their studies. Enrollment is now open-entry/open-exit. Thus students can progress at their own pace. Each participant is provided a minimum of thirty (30) hours a week of instruction in the five subject areas of mathematics, science, social studies, writing, and reading. Additional videotaped instruction and tutoring are provided based on individual student needs.

The educational component is tied closely to the behavioral component called "life transfer skills." All instruction and counseling plans and activities are designed to promote these skills. Life Transfer Skills can be defined as those skills needed by an individual to function effectively in society. They include skills learned through the stress management, career selection, money management, avocational interests, and time management. Migrant/seasonal farmworkers often tend to lack experience in acquiring and applying life skills. The H.E.P. program encourages students to gain confidence in these abilities and to determine their applicability for transfer to their lives outside of the H.E.P. program.

Access to local community and technical college services and activities assisted in the development of life transfer skills and program adjustment. All the present H.E.P. sites are located near universities, community colleges and technical colleges. Thus entire families have access to the same facilities as the student. Family involvement is encouraged, thus utilizing the nuclear family concept.

The University of Tennessee has established H.E.P. programs in the following states:

<table>
<thead>
<tr>
<th>State</th>
<th>County or City</th>
<th>Institute of Higher Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tennessee</td>
<td>Cocke Co.</td>
<td>University of Tennessee</td>
</tr>
<tr>
<td>North Carolina</td>
<td>Rockingham Co.</td>
<td>Rockingham Community College</td>
</tr>
<tr>
<td></td>
<td>Henderson Co.</td>
<td>Blue Ridge Community College</td>
</tr>
<tr>
<td></td>
<td>Haywood Co.</td>
<td>Haywood Community College</td>
</tr>
<tr>
<td>South Carolina</td>
<td>Aiken Co.</td>
<td>Aiken Community College</td>
</tr>
<tr>
<td></td>
<td>Gloversville Co.</td>
<td>University of South Carolina</td>
</tr>
<tr>
<td></td>
<td>Spartanburg</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Johns Island</td>
<td></td>
</tr>
<tr>
<td>Georgia</td>
<td>Valdosta</td>
<td>Valdosta State College</td>
</tr>
</tbody>
</table>

In addition to the above mentioned institutions, our satellite

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programs have established strong linkages with the following local programs and agencies targeting migrant/seasonal farmworkers. These linkages allow us to better serve our students and families.

1. Telemon Corporation
2. Tennessee Opportunity Program, Inc. (TOPS)
3. Our Lady of Mary Community Outreach Services, Inc.
4. State Migrant Education Program
5. Migrant Health Clinics
6. Local Interagency Coordinating Council
7. State Farmworker Organizations
8. Prime JTPA Sponsors
9. State Dept. of Labor
10. Employment Security
11. Dept. of Human Services
12. State Migrant Education Offices
13. State Dept. of Education
15. Agric. Extensions
16. Schools/Churches
17. Farmworker Unions
18. Farm Owners
19. Food Stamp Offices

Other possible contact and referral locations are rural gathering places (country store, feed distributors, tobacco barns, produce markets, etc.) and traditional word of mouth canvassing along rural roads. Another obvious source we use to assist us in our efforts to reach and teach the migrants and seasonal farm workers are the secondary schools near the H.E.P. sites. They can provide us with valuable information after the students have dropped-out of school and are now within the age guidelines of our grant.

The program is presently serving 90% of the 167 student goal. This is considered an excellent average for a commuter program. Students enrolled in the program are passing the GED test at a 73% rate. This average is consistent with the 70% passing rate for adults taking the GED test as reported by the American Council on Education. Sixty-six percent of the student completing the program were placed in competitive/non-farm work employment. Sixteen percent entered post-secondary education (The University of Tennessee H.E.P. End of the Year Report, 1994).

The University of Tennessee H.E.P. program is reaching a
migrant/seasonal farm worker population that is often invisible and not served by other programs. After six years of the site based program, we feel confident that we are increasing educational opportunities for the migrant/seasonal farm worker. More important, the program is not just keying in on the young, but we are working with the extended family while encouraging the older members to take advantage of the H.E.P. program.
References


Gotts, E. (1989). HOPE revisited: Preschool to graduation, reflections on parenting and school-family relations. AEL


The University of Tennessee Continuation Application for Grants under the High School Equivalency Program, January 1992.

AN EXIT INTERVIEW: THE CULMINATING REFLECTIVE EXPERIENCE

Introduction

The rural nature of South Dakota and the fact that the state is noncategorical require special educators to be "experts" not only in characteristics of many areas of disabilities, but also in teaching methodologies. "Training Teachers for All Children in South Dakota" was a federal grant awarded from the Department of Education, Office of Special Education Programs. The project was designed as a master's level training program which would train teachers to serve children with disabilities within the general school environment. Twenty six leaders in special education and regular education were identified from across the very rural state of South Dakota to be participants in this project. They were to serve as a core group to provide for the transition of special education service delivery to a collaborative/consultative teacher model for children with severe disabilities.

With the focus of this program being on a collaborative consultation model to facilitate inclusion in general education settings, it was imperative that grant participants display their ability to cooperatively problem-solve, design programs, and evaluate needs within their local districts. Ultimately, this had to be articulated and visible not only in assignments completed but also observed by others at the exit interview. The exit interview was required as a culminating reflective activity for the internship. This practice of assessment has shown great promise as an method by which teacher educators can engage students, practicing professionals, administrators, parents, and others in building partnerships between schools, universities, and the community (C. Cloninger, personal communication, May 24, 1993). This exit interview has become a culminating reflective experience that has resulted in an excellent public relations tool to foster support for special education and community opportunities for individuals with disabilities in these rural communities.

Description of Training Project

A primary goal for the outreach masters degree program was the development of a trained group of educators to assume leadership roles with the objective of leading their communities and educational settings toward greater integrated opportunities for children with severe disabilities. Four major impact indicators were also identified by the grant. First, that the collaborative/consultive teacher model was affecting the methods
and practices of rural school districts in the assessment of children and placement of children into integrated settings. Second, that professionals trained could easily articulate the concepts of least restrictive environment to fellow teachers, parents, and the community to encourage placement of children with severe disabilities including children with multi-sensory impairments within general education settings. Third, that there was evidence of teacher acceptance of placement of children with severe disabilities including those with multi-sensory impairments into general settings and within home districts. Finally, that training of administrators would be viewed as an ongoing process but that it would have an impact on children being more readily served within general education settings within home districts.

Coursework for the program reflected these goals and was delivered over a period of three years with the third year focusing on the internship experience. Because of the rural nature of our state, the location of the University and the fact that these students were all practicing teachers, creative delivery of the coursework was essential. The delivery of course work information included on-campus classes during a shortened summer session, outreach delivered coursework to three different sites, use of one telecourse, and the use of the new South Dakota Rural Development Telecommunications Network (RDTN) at some eight sites across the state.

This project has been based on a list of competencies designed to prepare teachers who are knowledgeable in working with children with severe disabilities but also knowledgeable in the collaboration skills necessary to facilitate inclusion into regular environments. Students completed a self-evaluation of their competencies in the following 15 areas along with designing personal improvement plans to be followed during the internship experience if needed.

Table 1

<table>
<thead>
<tr>
<th>Project Competency Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Philosophy, History and Ethical Issues</td>
</tr>
<tr>
<td>Curriculum for Students with Severe Disabilities</td>
</tr>
<tr>
<td>Assessment of Students with Severe Disabilities</td>
</tr>
<tr>
<td>Development of Goals and Objectives in Various Domains</td>
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<tr>
<td>Classroom Scheduling</td>
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<tr>
<td>Interventions in Various Domains</td>
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<tr>
<td>Language Development</td>
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<tr>
<td>Physical Management</td>
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<tr>
<td>Behavior Management</td>
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<tr>
<td>Parent Involvement</td>
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<tr>
<td>Litigation and Legislation History</td>
</tr>
<tr>
<td>Professional Organization</td>
</tr>
<tr>
<td>Supervision of Paraprofessionals</td>
</tr>
<tr>
<td>Interdisciplinary Participation in IEP Development and Implementation</td>
</tr>
<tr>
<td>Professional Collaboration and Consultation</td>
</tr>
</tbody>
</table>
Internship Requirements

The notion of an exit interview reflected the requirements for the internship. The internship requirements were built upon the knowledge base gained through the masters level coursework. The focus of many of the assignments was on involving the school and community in accepting their roles in providing an inclusive environment for these children with disabilities. Table 2 presents a listing of the fourteen assignments that were to be completed during the internship experience:

Table 2

Internship Requirements

1. Preparation of two IEP's with a written discussion of the team's collaborative process involved in the IEP development
2. Participation in regular classroom instructional interventions
3. Design and implementation of individual instructional interventions for students with documentation of progress
4. Documentation and evaluation of a "Sharing Expertise" project
5. Development and implementation of a systems change project that reflected collaborative planning and long range benefits to the school and students
6. Preparation of an evaluation plan and report for a student
7. Observation of other classes where children with disabilities were being taught in inclusive settings.
8. Observation of two different programs for persons with severe disabilities
9. Documentation through use of videotape of their work with students in a variety of instructional domains
10. Participation in on-going professional activities
11. Some type of paraprofessional planning
12. Some type of transition Planning
13. Collaboration activities with teachers
14. Collaboration activities with parents

The Exit Interview Process

Evidence of expertise, leadership, and professional responsibility was exhibited in the organization and presentation of information at the exit interviews. Numerous examples of quality programming aimed at inclusion as well as collaborative efforts of the interns were cited by administrators, other school personnel, parents, community leaders, and university instructors who were present at these exit interviews.

The exit interview process was an extension of a collaborative/consultative team approach using a philosophy grounded in reflective teaching. Participants in the exit interview typically had been involved in activities where they work
cooperatively to achieve a common, agreed upon goal through the process of decision-making and problem-solving. These are among the critical skills, according to Villa and Thousand (1988), for successful inclusion and maintenance of students with severe disabilities in the regular classrooms. In evaluating the outcome of the exit interview, observers were asked to note both the intent and the effect of the various projects presented by the practicum student. Phillips and McCullough (1990) suggest that the collaborative consultation model can be evaluated in terms of administrative support, systematic program development, ownership with action, feasibility, and reduced resistance of staff based on practical and specific professional development activities.

The specific evaluation criteria for the exit interview were:
1. Evidence of expertise with regard to knowledge of special education and interventions.
2. Evidence of collaboration/consultation skills.
3. Articulation of the impact of the practicum on regular education.
4. Demonstration of awareness as to the complexity of a team approach with regard to assessment, teaching, and planning a systems change.
5. Evidence of professionalism in organizing and planning activities for students, parents, teachers, and paraprofessionals.
6. Evidence of leadership and teamwork capabilities, skills in communication/listening, sharing knowledge, and understanding.

The model for each exit interview incorporated a presentation by the practicum student, a formal question and answer session, a closed session for evaluators to discuss their observations, followed by an open session with the student to give feedback. Students were required to organize the actual format and invite participants to serve as the team of observers. The exit interview team always included the university internship supervisor. Others who were interviewed by the team included the local administrator, principal, superintendent or director of special education. The interview team itself was varied in each school including such individuals as university teacher educators, Department of Education/Office of Special Education employees, local business and professional leaders, other teachers, school psychologists, social workers, school board members, or related service providers.

Figure 1 shows the overall structure of the exit interview.
An Exit Interview Case Study

The following is an illustration of an actual exit interview. This particular exit interview occurred in a very rural community in South Dakota. The student population of this elementary school included primarily native Americans. The special educator had been employed at this school about four years. Participants on the exit interview team included the teacher's internship supervisor from the university, a school board member from the district, and two regular education university professors.

In preparation for the interview, the special educator had completed a number of activities. She had sought parental permission and actually videotaped the children with disabilities in the inclusive settings. She had also videotaped parents of these children describing how their education had changed and how their children's interactions with other children had changed. Others included in the video were regular education teachers, peers who served as peer buddies to the students with disabilities, and integrated classrooms in action. This had been edited in a professional manner to facilitate expertise sharing beyond this...
school district. The intern had also prepared interview questions to ask the various persons who would be interviewed.

During the actual exit interview, the outside exit interview team observed in three classrooms where inclusion of children with disabilities was occurring. In addition, the team interviewed students who acted as peer buddies, a parent of a child with a disability, regular education personnel who worked as co-teachers, the principal, and the other special education teacher and paraprofessional who worked with the intern. The breadth of impact of this intern's training on the school was evident in all of these interviews. Clearly, there had been a true team process that had made the changes in this school for these children with disabilities.

In a school that is in a "remote" as well as "rural" part of South Dakota, little or no opportunity usually exits to actually share these excellent teaching experiences. The exit interview process educated and expanded the knowledge base of local individuals (the school board member) as well as people who are training our future regular educators (university professors). It provided everyone on the team a new way of looking at the potential of individuals with disabilities and examining where we might go in education.

Conclusion

In all cases, positive interdependence (Thousand, Fox, Reid, Godek, & Williams, 1986) was exhibited as an outcome of the exit interview and this provided a reflective framework to support future collaborative teaming. The teachers and schools were given their due recognition for the collaboration they had exhibited in creatively modifying the learning opportunities for persons with disabilities in their home schools. Problem-solving and goal-setting was often one of the practical results of the exit interview. In part, this was due to the sharing of experience in a non-threatening environment, communicating and valuing practical knowledge, articulating what was known about the uniqueness of a setting, demystifying professional roles, and building collegiality. These have been identified as components of reflective teaching (Gore, 1987). These factors of reflective teaching were also present as goals of the individuals involved in the collaborative/consultative internship. The exit interview process has proven to be a positive means to build on the many facets of both collaborative and reflective experiences.
REFERENCES


BUILDING POSITIVE RELATIONSHIPS ON THE BORDER WITH PARENTS OF SPECIAL STUDENTS:
EFFECTIVE PRACTICES FOR THE I.E.P.

The border southwest is one of the fastest growing areas in the United States. Much of the growth is directly associated with immigration to the United States of people of Mexico and other Latin American countries. As new border crossings are opened and as the North American Free Trade Agreement (NAFTA) is implemented, border growth is anticipated to remain high. Many communities along the United States/Mexico border have been or are becoming predominantly Spanish speaking. The ethnic demographics and the shift in language reflects the increased impact that immigration is having on border states.

Because many of the new immigrants are limited or non-speakers of English, border school districts are experiencing policy/process concerns and issues involving communication with parents and students. Administrators, teachers, and school boards are necessarily addressing certain realities of border change to effectively meet the needs of students and the community (Cooper, Gonzalez, 1993). As the border becomes redefined, other states and schools districts beyond the traditional border corridor will likewise be impacted.

There are issues and concerns affecting education on the border other than differences in language. One such issue is the difference in educational systems. Educational systems in the immigrant's native countries are often different than the American educational system. Laws and recognized rights governing special education in the United States certainly differ from those in other countries. Unfortunately, this leads to greater confusion and disconnection between home and school.

Many new immigrant parents have limited education which exacerbates the situation. Research suggests that parents who are aware, involved, and connected to their children's education have a positive effect upon academic achievement. This also applies to parents and students of special needs. However a "disproportionate number of these individuals ... do not have the skills or knowledge to fully participate" (Banks, 1993).

Intrinsic to successful relationships on the border with parents of special students is the concept of informed consent. Cornerstone to a workable Individual Education Plan (I.E.P.) and in true spirit of the law, informed consent is "understanding" despite education levels, cultural differences, and language. Given difficulties of achieving true informed consent in homogeneous populations, small rural districts are at a greater disadvantage. Proponents of restructuring see the movement as an opportunity to establish school environments that are culturally flexible and empowering. However, an "empowering school culture and social structure will require restructuring of the culture and organization of the schools" (Banks, 1993). Donahoe suggests...
that in order to achieve change in school culture there must be change in school structure (Donahoe, 1993). This implies that schools must go beyond traditional approaches to problem solving because issues arising along the border are rather non-traditional and involve great numbers of parents and students. It also implies that the types of changes necessary to bridge linguistic and cultural differences are significant and structural in nature.

The I.E.P. is used herein synonymously as the committee that decides placement, dismissal, and reviews the student's status. Since the I.E.P. is often the primary contact with parents of special students, it is important to examine successful practices and/or policies effecting the I.E.P. in border schools. Rural schools along the border are fast becoming aware of the changing dynamics of their communities and the subsequent impact on planning and program. Through necessity they have developed creative approaches and other fundamental processes for the I.E.P.

For this study, several border principals and administrators were asked their perceptions of effective practices for the I.E.P. The principals and administrators were from small rural border districts experiencing the impact of immigration and other related issues. The composite information is outlined in the following as effective practices:

1) **Procure previous information on the student** Getting previous information on special education students can often be weeks, sometimes months in arriving. For students coming from other countries, information may be even more difficult to obtain. Because of differences in educational systems, laws, and communication infrastructures, information may sometimes never be received. It is important that as soon as a student is identified as requiring an I.E.P. schools attempt to obtain official information. During this period, schools can begin developing their own information history by visiting with the parents. Many new immigrants are poor and have limited transportation resources. If parents cannot be reached by phone and cannot arrange to come to the school a personal interview at the student's home may be appropriate and necessary. School personnel can conduct a home visit to meet the student and parents while obtaining valuable preliminary information.

2) **Establish a climate of reception** The I.E.P. is frequently the initial contact parents may have with the school and faculty. It is important that a positive and caring climate be established. This includes the basic courtesies of hand shaking, smiles, and introductions. First impressions are valuable. The meeting room should seat all participants so that eye contact and communication is maximized. Seating should convey the message that parents are important and are equal participants in decision making. Do not position parents apart from other members of the I.E.P. The chairperson should sit next to or directly across from parents avoiding barriers such as desks. Care should be taken to avoid divisive arrangements. Most administrators are schooled in interviewing techniques which should be applied to the I.E.P.

3) **Determine the language of comprehension** From the onset of the I.E.P., the meeting should be conducted in the language most comfortable to parents. Because the parents are the key feature of an effective I.E.P. it is logical make every effort to maximize communication while reducing the number of linguistic barriers. Prior to the meeting, the committee chair should
simply ask the parents with which language they would feel most comfortable. Optimally, this information may have already been obtained from the home visit.

Someone on staff must be fluent in the preferred language. This is seldom a problem on the border. However, beyond the traditional border area, staff members with abilities to simultaneously or consecutively translate (accurately) are sometimes difficult to obtain. There are a variety of successful strategies for effective communication with parents of different languages such as translating technology, staff development, and incentive programs (Cooper, Gonzalez, 1993). Staff members are more willing to develop second language skills as "the ability to speak Spanish is no longer seen as a liability rather as a positive strength (Glazer, 1993). For native speakers this comes as a welcome opportunity.

After determining the language to be used during the I.E.P., introductions should be made describing the role of each individual attending the meeting and how the role relates to the student. For example, if the diagnostician is in attendance, a description of what a diagnostician does and how they have been involved with the student would be both informative and appropriate. Often committees, accustomed to frequent I.E.P.'s take for granted various roles and protocol of the I.E.P. Parents new to the American educational system may not understand the roles of various individuals included in the typical I.E.P.

4) **Preface the I.E.P. with a brief summary of student background and define the purpose of the meeting** Because the I.E.P. serves as the decision making meeting for the student's assessment, placement, dismissal, etc., it is important the purpose of the meeting be clearly defined at the beginning. Not all parents fully understand the purpose of the I.E.P. Such efforts serve as both courtesy and effective communication.

5) **Keep the level of communication simple and understandable** Sustain a dialog with the underlying assumption that in most cases parents are not familiar with specialized diagnostic and educational terminology. If many experienced regular classroom teachers have difficulty defining visual acuity and memory retrieval, it is ridiculous to believe that new immigrant parents, from a different and often limited educational background, are going to do any better. Effective communication does not only involve translation from one language to another, but also using terms that all can understand.

6) **Serve as an advocate for the student** Each I.E.P. should be conducted to insure that decisions are made in the best interest of that particular student. Although decisions are colored by differing perspectives (e.g., administrator, teacher, parent), serving as an advocate for the student will help reduce the biases inherent in collaborative decision making.

7) **Include pauses during the I.E.P. to check the "pulse" of parental comprehension** Throughout the I.E.P., timely pauses should be included to help clarify concepts and provide the opportunity for parents to respond and interact. Parents do not attend I.E.P.'s to remain passive observers. It is the role of the educators to foster active parental participation within this setting. Decisions are made during the I.E.P. effecting their child. Every opportunity should be made for parents to contribute and participate in the care and education their children receive.
Additionally, parents should be viewed as an integral, contributing authority on the child. The parents' information, perhaps not technical in form, is no less valuable than the diagnostician's information. Ask parents about their perception of their children's progress, the frequency of contact with the teacher, and their thoughts and feelings about the information voiced during the I.E.P.

8) **Summarize the points agreed upon in the I.E.P.** In a typical I.E.P., many aspects of the student's education and development are discussed. All points finally agreed upon should be summarized toward the conclusion of the I.E.P. These points may include hours of speech, physical therapy, dates of the next re-evaluation, etc. It is also productive to stress the value of the meeting helping to insure positive attitudes and involvement in future meetings.

9) **Observe the nuances and protocol while signing off on the I.E.P. documents** After points are summarized, parents should be first to sign the documents. This subtle gesture reflects the primary significance parent participation has in the I.E.P. It also communicates the message of the parents' ultimate authority for the child's educational experience. However, before the parents sign documents, the committee chair should describe each portion of the documents so that parents are fully aware of what they are signing. The last to sign should be the administrator. The administrator should review documents making sure that all education, technical, and legal details are covered. The administrator's signature demonstrates that all details have been reviewed and are appropriate.

10) **Involve the parents in developing specific instructional goals and objectives** After the I.E.P., the primary special education teacher, with the parents, should strive to develop specific instructional goals and objectives for the student. Additionally, teachers may send regular newsletters home to parents describing planned weekly events and activities. Newsletters are most effective if they are written in the language parents understand. Again, having someone on staff with accurate translating skills can benefit.

Few but those actually working in districts along the United States/Mexico border can truly appreciate the growth and impact that immigration is having on the border southwest. Small, rural school districts are facing the immediate thrust of growth including communication and cultural issues. These issues will soon be experienced by districts beyond the traditional border corridor. Districts will benefit by examining effective practices for the I.E.P. as they strive to build positive relationships with parents. As described in this article, some of the ideas and practices are equally applicable and effective in homogeneous environments. However, it is important to consider that in either realm, effective practices are most successful by the fine orchestration of all of the points. Throughout the process of developing positive relationships and effective I.E.P.s must be a genuine interest in the student, regardless of the language spoken or cultural difference. School districts must be prepared to make the necessary changes in practice and policy to best effect positive relationships on the border with parents of special needs.
Bibliography


ESTABLISHING PARTNERSHIPS AMONG WOMEN EXECUTIVES IN RURAL SCHOOL DISTRICTS

For women beginning their administrative careers, it is imperative that training programs address skills, attitudes and issues necessary for effective leadership in the school and community. Training programs must begin with participant baselines of the essential components of leadership development. The basic question must be: Where are the women in their development and where do they need to be based on the literature regarding successful women leaders? A course, Women in Educational Leadership, has been developed to address such issues.

To facilitate course relevancy and applicability, an open-ended questionnaire was administered to the 44 female participants. Forty-five percent of the respondents work in rural sites, 25 percent in urban, and 30 percent in suburban. Questions were related to: 1) barriers women face in attaining and moving up in administrative jobs; 2) suggestions for overcoming barriers; 3) fears that women face related to becoming an administrator; 4) plans for overcoming fears; 5) networking; and 6) mentoring. Results of questionnaires were analyzed in the context of existing literature on women in leadership roles. The information most significant is the data that emerged in the following three patterns: lack of self-confidence, misconceptions regarding how to advance in an administrative career, and misconceptions related to networking/failure to network. No significant differences regarding fears, barriers, misconceptions, and lack of awareness or understanding of issues and concerns were revealed among the three groups.

Lack of Self-Confidence

Ninety-five percent of the responses indicated negative attitudes toward their own abilities and a lack of confidence to successfully do the job. The following quotes are representative:

"One of my greatest fears is that I will make a mistake."
"I fear that when I get an administrative job, I will not be able to please everyone -- my family, peers, and co-workers."
"I do not know very much about politics; I have a fear of political missteps that will hurt my advancement."
"One of my greatest fears in becoming an administrator is that I will face a situation that I won't know how to solve."
"There is so much to know; I am afraid that something will come up and I will not know the correct answer."
"I am afraid that I will not be able to do all jobs as well as I should: wife, mother, administrator, etc."
"I am fearful that I will be unable to make quick decisions and effectively communicate those decisions."
"My major fear in becoming an administrator is not knowing my job well."
"I am afraid I won't live up to the Super Woman syndrome-- the idea that I must be perfect wife, perfect mother, perfect friend, and perfect administrator."

The comments above indicate feelings of inability to live up to expectations of others, to make decisions and communicate those to colleagues, to know the job immediately, to solve problems, to be knowledgeable enough, and to be all things to all people. Forty-two of the women enrolled in the course indicated anxiety and felt that they were not equipped to meet the demands of leadership roles. Data found is in contrast to what Gardenswartz and Rowe (1987) posited where successful women leaders exhibit high degrees of confidence and great skills in every area. The respondents expressed in the study feelings of inadequacy and fear. These data would appear to indicate that the respondents (in initial stages of administrative careers or in initial preparation programs) are at the lower end of a continuum ranging from an extremely low level of confidence and high feelings of inadequacy to the confidence level described by Gardenswartz and Rowe (1987) as critical to success. It was important that these data be addressed in the course to ensure that the women received adequate training, support, and motivation in the skills and attitudes indicated to be important to successful women leaders.

**Misconceptions About How to Advance in an Administrative Career**

Eighty percent of the women indicated misconceptions of career advancement techniques. The ideas for career advancement were naive and narrowly focused on obtaining more credentials, serving on more committees, working harder, getting more education, and "just doing the right thing."

Following are some comments of the respondents which point out the misconceptions:

"I believe if you just work hard and keep a positive attitude, then you will be recognized and will be given opportunities for advancement."
"I plan to pursue my doctorate so that school personnel cannot possibly overlook me as an administrative candidate."
"In order to advance I feel I must obtain superior credentials."
"I feel that I will not advance without a great deal of study, hard work, outside experiences, university courses, and staff development."
"In order to be an administrator I know that I will have to work hard and do the tough jobs that no one else wants."
"In order to prove I am capable and organized, I must work harder in volunteering for more committees."
"To move up in administration I know that I must be current on teaching styles, learning styles, classroom procedures, the student population, etc., etc., etc. ... ... ..."
"I feel I must learn, work harder, and more effectively than others, especially younger individuals."

"In order to advance, I will find out what is expected of me and ask about those things that I do not understand."

Although a variety of research (Slick and Gupton, 1993; Brown and Merchant, 1993; Marshall, 1985) indicates that hard work alone is insufficient for women's advancement in administration, comments of these respondents reflected a lack of awareness of career patterns of successful women, a lack of understanding of what is necessary in order to obtain and perform successfully in an administrative position and a lack of awareness of the importance of a career advancement plan. McGrath (1992) emphasizes that being a member of a network, including men, is of equal importance to "hard work and competence."

**Misconceptions Related to Networking/Failure to Network**

Many women believe that if they obtain the required credentials and do a good job in teaching, or whatever job they're doing, they'll get that promotion they're seeking. That just isn't always true. Networking is critical (Collier, 1992).

One hundred percent of the respondents viewed networking as critical to advancement, and 66 percent of the respondents indicated that they were members of a networking group. However, when respondents were asked to describe their specific networking group or networking, 93 percent described groups and experiences that are not typical of current definitions of networking and networking groups related to career advancement (Farrant, 1986; Schmuck, 1986; Green, 1982) such as:

"My networking group consists of the three high school chemistry teachers. We meet frequently to exchange teaching ideas and we cooperate to set up labs for each other and share test questions and materials."

"The networking group I attend is the Brazos Valley Foreign Language Collaborative meetings. I joined because I wanted to learn what others in my field are accomplishing."

"In my networking groups, I team plan, share responsibility for carpooling, and study with others working on their certification."

"I joined an informal networking group because as a new teacher I needed the experienced teachers' expertise and they needed my freshness."

"My husband and I discuss networking often because it is very important to his job success. The coaches wives organization is formal and provides job information. I joined because my husband is a coach. This group is very beneficial because I have had a chance to visit with women who frequently move, change jobs, and are viewed and criticized frequently by a community."

"I believe I network as I perform my job."
"We talk a lot about teamwork but not about networking."

The need for and benefit of networks among women has been well established in the literature (Slick and Gupton, 1993). Brown and Merchant (1993) stress the importance of women's valuing and maintaining contacts as they move through their careers, describing networking as a "primary measure of the success that they have in their own careers." Because networking is essential, particularly for women in rural and small school districts, it was critical that the women in the course were afforded opportunities not only to correctly identify a "career enhancement network", but also to begin to formulate strategies for establishing the network and to realize that career enhancing networking should become a priority.

Summary
Responses to the questionnaire provided valuable data in designing the course. Content addressed the three prevalent patterns: lack of self-confidence, misconceptions regarding how to advance in an administrative career, and misconceptions related to networking/failure to network. The course reinforced components of successful leadership already pointed out in the literature. Assignments, presentations and activities centered on the establishment of partnerships and moved participants toward the development of a career advancement plan. Successful women leaders shared experiences and expertise, served as encouragers and role models, and invited participants to be a part of their networks. Participants designed professional portfolios, created a professional networking register, formulated and updated resumes, improved their professional image, developed a five-year plan for career advancement, participated in a mock interview conducted by women executives, and interviewed male and female leaders in government, business, and education. Additionally, participants took the initiative to establish their own network--an area chapter of a state organization for women leaders (Texas Council of Women School Executives).

Future Agenda for Research
Formative course data analyses through journal entries and course interactions indicate feelings of high satisfaction among the participants, increased self-confidence, and belief that the course is addressing their needs. Summative data will be collected to ascertain the effectiveness of course activities and assignments and to determine if attitudes, priorities and levels of sophistication have changed. A longitudinal study is planned to determine long-term benefits of networking and the partnerships established as a result of the course. A confirmatory analysis will be conducted with other women who are initiating administrative careers. A comparative analysis is planned to determine if similar patterns emerge among males who are beginning their administrative careers. Data from rural, urban, and suburban participants will be compared.

REFERENCES

Collier, V. (1992, April) Tips from a superintendent. Paper presented to Forward and Upward, Women in Educational Leadership Seminar, Sam Houston State University, Huntsville, TX.


Intensive
Family-Based
Services
Program

A service of the Southeast Regional Troubled Children's Committee, Inc. (SERTCC)

A Supportive Alternative To Out-of-Home Placement For Troubled Children and Their Families
The Southeast Regional Troubled Children's Committee, Inc. (SERTCC) has been in existence since 1985. The involvement of SERTCC initially was with an understanding that cooperative agreements between the six divisions of the Department of Human Resources and Education at the state level would come about. This working together would assist in providing community resources to serve troubled children at the local and regional level. At it's beginning there was some indication that State Troubled Children money might be decentralized and given to regional and/or local committees to make decisions on services for troubled children. Since this concept did not materialize, SERTCC has continued to move forward in helping local troubled children committees form and become functional agencies within each of the twenty-four counties that is served by SERTCC.

SERTCC received a National Institute of Mental Health (NIMH) grant for $550,000.00 from the Federal Government with the cooperation of the State Department of Human Resources (Division of Mental Health) to provide services to troubled children and their family in the twenty-four county area. This was a five year grant which ended in June of 1992. The State of Georgia, seeing the potential and positive impact of this program, funded SERTCC at $135,000.00 a year as an item under the State Department of Human Resources (Division of Mental Health). By providing intensive family-based services within the homes of dysfunctional families, we have been able to keep families together and prevent out-of-home placement. As of this date, we have served families in twenty-two of the twenty-four counties located in southeast Georgia. Our statistics show, through seven years, that two hundred and three (203) children have been served along with approximately eight hundred and forty-eight (848) family members which include other siblings and parents of the troubled child. As you are aware, when you are dealing with a troubled child in a dysfunctional family, you are really dealing with the entire family unit.

COST EFFECTIVENESS

As of this writing, we have been successful in keeping children in the home and have the family unit functioning after the twelve weeks of service at a success rate of eighty percent (80%).

COST OF INTENSIVE FAMILY-BASED SERVICES -- $3,000.00
(SERVICE PROVIDER GOES INTO HOME OVER A 12 WEEK PERIOD OF TIME)

VERSUS

INTERMEDIATE CARE PLACEMENT -- $7,540.00

VERSUS

INTENSIVE CARE PLACEMENT -- $16,395.00
(12 WEEKS)
FOLLOW-UP SERVICES PROVIDED:

At the end of the fourth year follow-up was conducted by the program evaluator. Follow-up data included input from the agencies involved as well as the parents of the troubled child. Data covered the time period up to a year after services were terminated.

STATUS AND FUTURE PLANS:

The families of southeast Georgia are gratified that Governor Zell Miller thought highly enough of our program to include it in the FY-93 budget and again in the FY-94 budget. We believe that the type of services and the way they have been administered is a cost effective alternative to other, more expensive and intrusive, options for troubled children.

SERTCC, Inc. has been granted 501-c3 status which allows us to submit proposals for foundation grants. SERTCC is also available to receive any contracted services from other agencies that deal with dysfunctional families and troubled children. This purchase of services is cost efficient and effective as compared to intensive and intermediate care and you will be keeping the family together. Our success rate is outstanding.

The general membership meets quarterly with the officers and board members meeting monthly to provide direction and leadership not only to the general members but also to the service providers who are doing the important work with these dysfunctional families and their troubled children. As you can see, our commitment to troubled children in the area is just as strong as ever and we feel like we are making a real difference with the families that we are involved with in providing in-home services.

In summary, the purpose of SERTCC is to develop, facilitate, improve and coordinate the delivery of services to troubled children and their families in primarily a twenty-four county area of southeast Georgia. Our goals are:

1) to ensure appropriate case resolution and case staffing at the local and regional levels;
2) to develop effective policies and procedures to achieve the purpose(s) of the organization;
3) to develop and/or facilitate continuum of community resources to meet the needs of troubled children and their families;
4) to advocate for services to children (intervention/prevention) through age twenty-two and their families;
5) to help increase the responsiveness of various agencies to the needs of children and their families through staff development and staff training.
CAN SERTCC COME TO MY AREA?

With a sincere commitment on the part of CEO's of human service agencies, the business community and compassion for the children of our communities, the concept of SERTCC can work in any community. It takes dedicated people from all human agencies, business and education working together as a unit to be effective and really make a difference. We in southeast Georgia are very fortunate to have this kind of working relationship.

We (SERTCC) believe that the concept of interagency collaboration and networking between human service agencies and the private sector provides a purpose, allows the players to be focused on helping at-risk students and dysfunctional families along with providing:

a) Professional Staff Development
b) Interagency network on daily and weekly basis
c) Becoming a liaison resource for other agencies
d) Quarterly staff Development
e) Intensive family-based services for multiple service areas can be replicated effectively by adapting the concept to match the needs of your area.

INTENSIVE FAMILY BASED SERVICES
OPERATIONAL MODEL

1) FAMILY COUNSELING: To include any of the following:

a) Crisis intervention
b) Counseling to strengthen marital unit and to help husband and wife in parental roles.
c) Counseling to single parent or other guardian in order to strengthen and structure positive parenting techniques and teach behavior management techniques where needed.
d) Counseling to help organize and structure family unit through more specifically clarifying roles, setting limits, and more clearly defining the behavioral expectations of one another.
e) Teach communication skills and problem solving.
f) Teach parenting skills such as child growth and development, child caring techniques, infant stimulation, toilet training and accident prevention.
g) Teach stress management techniques such as coping skills, anger control and relaxation.
h) Teach organizational skills such as money management, time management and scheduling.
i) Counsel to help stabilize living arrangements.
j) Counsel individual member or family as a whole about needs for long term therapy.

2) COORDINATE COMMUNITY RESOURCES

a) Act as a referring agent and liaison between family and community resources.
CLIENT STATISTICS
1987-1988

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OUTCOMES AT CONCLUSION OF SERVICES

| CHILDREN REMAINING AT HOME | 17 |
| CHILDREN LIVING WITH RELATIVES | 1 |
| CHILDREN REMAINING WITH FOSTER FAMILY | 1 |
| CHILDREN PLACED OUT OF HOME | 6 |
| NHHS FUNDS AVAILABLE FOR CURRENT YEAR | $15,578.14 |
| AVERAGE COST PER FAMILY | $4,623.12 |

CLIENT STATISTICS
1988-1989

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</table>

AVERAGE AGE OF CHILD 10
AVERAGE INTERVENTION PERIOD 8 WEEKS

REFERRING AGENCIES

<table>
<thead>
<tr>
<th>MH</th>
<th>DPCS</th>
<th>PSYCHO</th>
<th>SCHOOLS</th>
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<tr>
<td>6</td>
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<td>2</td>
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COUNTIES SERVED

<table>
<thead>
<tr>
<th>BULLOCK</th>
<th>CHATHAM</th>
<th>GLYNN</th>
<th>TATTNALL</th>
<th>TOOMBS</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>2</td>
<td>7</td>
<td>2</td>
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</tbody>
</table>

OUTCOMES AT CONCLUSION OF SERVICES

| CHILDREN REMAINING AT HOME | 13 |
| CHILDREN LIVING WITH RELATIVES | 1 |
| CHILDREN CURRENTLY BEING SERVED | 5 |
| NHHS FUNDS AVAILABLE FOR CURRENT YEAR | $44,421.86 |
| AVERAGE COST PER FAMILY | $35,028.12 |

362
371
### CLIENT STATISTICS
#### 1989-1990

**Child Referred**

<table>
<thead>
<tr>
<th></th>
<th>Black Male</th>
<th>Black Female</th>
<th>White Male</th>
<th>White Female</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td>Male</td>
<td>15</td>
<td>4</td>
<td>19</td>
<td>10</td>
<td>48</td>
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<td>Female</td>
<td>10</td>
<td>7</td>
<td>11</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>48</strong></td>
<td><strong>33</strong></td>
<td><strong>39</strong></td>
<td><strong>14</strong></td>
<td><strong>104</strong></td>
</tr>
</tbody>
</table>

**Average Age of Child**: 12.2

**Average Intervention Period**: 12 Weeks

**Referring Agencies**

<table>
<thead>
<tr>
<th>MH</th>
<th>DFC</th>
<th>Psychoed</th>
<th>Schools</th>
<th>Dys</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>8</td>
<td>11</td>
<td>9</td>
<td>4</td>
</tr>
</tbody>
</table>

**Counties Served**

- Glynn: 21
- Bulloch: 2
- Bryan: 1
- Camden: 1
- Charlton: 2
- Chatham: 4
- Evans: 1
- Jeff Davis: 1
- Liberty: 2
- McIntosh: 2
- Pierce: 1
- Tattnall: 6
- Toombs: 4

**Number of Family Members Served**: 200

**Outcomes at Conclusion of Services**

- Children Remaining at Home: 40
- Children Placed Out of the Home: 3
- Children Currently Being Served: 5
- State Funds Available for Current Year: $25,000.00
- NIMH Funds Available for Current Year: $140,430.00

**Average Cost per Family**: $53,601.82

---

### CLIENT STATISTICS
#### 1990-1991

**Child Referred**

<table>
<thead>
<tr>
<th></th>
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<th>Black Female</th>
<th>White Male</th>
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<tbody>
<tr>
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<td>8</td>
<td>1</td>
<td>9</td>
<td>4</td>
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<td>23</td>
</tr>
<tr>
<td>Female</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>23</strong></td>
<td><strong>5</strong></td>
<td><strong>12</strong></td>
<td><strong>8</strong></td>
<td><strong>1</strong></td>
<td><strong>43</strong></td>
</tr>
</tbody>
</table>

**Average Age of Child**: 11.9

**Average Intervention Period**: 8 Weeks

**Referring Agencies**

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<thead>
<tr>
<th>MH</th>
<th>DFC</th>
<th>Psychoed</th>
<th>Schools</th>
<th>Dys</th>
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<tr>
<td>7</td>
<td>4</td>
<td>6</td>
<td>4</td>
<td>2</td>
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</tbody>
</table>

**Counties Served**

- Glynn: 13
- Bryan: 1
- Camden: 1
- Charlton: 2
- Chatham: 1
- Evans: 1
- Liberty: 1
- McIntosh: 2
- Toombs: 1

**Number of Family Members Served**: 89

**Outcomes at Conclusion of Services**

- Children Remaining at Home: 18
- Children Placed Out of the Home: 2
- Children Placed with Other Family: 1
- Children Currently Being Served: 2
- NIMH Funds Available for Current Year: $100,000.00

**Average Cost per Family**: $4,347.83
CLIENT STATISTICS
1991-1992

<table>
<thead>
<tr>
<th>Child Referred</th>
<th>Parent/Guardian</th>
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<tr>
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</tr>
<tr>
<td>BLACK BLACK MALE FEMALE</td>
<td>MOTHER FATHER BOTH OTHER</td>
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<tr>
<td>4</td>
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<tr>
<td>3</td>
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<td>7</td>
<td>8</td>
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<table>
<thead>
<tr>
<th>Average Age of Child</th>
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<tr>
<td>11.67</td>
<td>12 WEEKS</td>
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<table>
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<tr>
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<tbody>
<tr>
<td>BULLOCH .......... 1</td>
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<tr>
<td>CHATHAM .......... 5</td>
</tr>
<tr>
<td>COFFEE .......... 1</td>
</tr>
<tr>
<td>EFFINGHAM .......... 1</td>
</tr>
<tr>
<td>GYNN .......... 3</td>
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<tr>
<td>LIBERTY .......... 2</td>
</tr>
<tr>
<td>MCINTOSH .......... 1</td>
</tr>
<tr>
<td>TATTHALL .......... 2</td>
</tr>
<tr>
<td>WARE ........ 1</td>
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<table>
<thead>
<tr>
<th>Referring Agencies</th>
<th>Number of Family Members Served</th>
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<tbody>
<tr>
<td>MH</td>
<td>5</td>
</tr>
<tr>
<td>DPCS</td>
<td>4</td>
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<tr>
<td>PSYCHOED</td>
<td>1</td>
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<tr>
<td>SCHOOLS</td>
<td>5</td>
</tr>
<tr>
<td>DYS</td>
<td>2</td>
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<tr>
<td>OTHER</td>
<td>1</td>
</tr>
<tr>
<td>TOTAL</td>
<td>67</td>
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</table>

<table>
<thead>
<tr>
<th>Outcomes at Conclusion of Services</th>
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</thead>
<tbody>
<tr>
<td>CHILDREN REMAINING AT HOME .......... 15</td>
</tr>
<tr>
<td>CHILDREN PLACED OUT OF HOME .......... 3</td>
</tr>
<tr>
<td>NIMH FUNDS AVAILABLE FOR CURRENT YEAR .......... $92,000.00</td>
</tr>
<tr>
<td>AVERAGE COST PER TOTAL FAMILY MEMBER .......... $1,373.13</td>
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CLIENT STATISTICS
1992-1993

<table>
<thead>
<tr>
<th>Child Referred</th>
<th>Average Age of Child</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLACK BLACK MALE FEMALE</td>
<td>12.4</td>
</tr>
<tr>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>19</td>
<td>3</td>
</tr>
<tr>
<td>35</td>
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<table>
<thead>
<tr>
<th>Counties Served</th>
<th>Funds Spent</th>
<th>Cost Per Child</th>
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</thead>
<tbody>
<tr>
<td>GLYNN .......... 14</td>
<td>$83,288.00</td>
<td>$2,379.66</td>
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<tr>
<td>TATTHALL .......... 5</td>
<td></td>
<td></td>
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<tr>
<td>WARE .......... 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOOMBS .......... 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BRYAN .......... 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHARLTON .......... 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>JEFF/DAVIS .......... 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BULLOCH .......... 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BRANTLEY .......... 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EFFINGHAM .......... 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAMDEN .......... 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MCINTOSH .......... 1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

FOR MORE INFORMATION CONTACT:
Dr. William F. Young
Chairman - SERTCC
Assistant Superintendent
Pupil Personnel Services
Glynn County School System
2400 Reynolds Street
Brunswick, Georgia
(912) 267-4220
INTRODUCTION

Lead is a common metal with a long history of diverse uses and has been known to cause neurological damage in humans. Cases of lead exposure and subsequent poisoning are extensive as the exposure sources are myriad ranging from mining, smelting and refining activities to lead paint, leaded gasoline and industrial emissions. Although lead targets the central nervous system, the symptoms and effects of lead exposure are varied and common to other medical problems, lead poisoning is difficult to diagnose without a blood screening test. At the present time, the lead blood level of 10 ul/dL is considered harmful.

The results of lead poisoning are most often dealt with in the school systems where, in some districts, it is estimated that over 50% of the students in special education classes are lead poisoning victims. In education, the effects of lead exposure can be expensive. In other historical times, lead exposure has been catastrophic. Lead production associated with silver mining has been linked to the rise and fall of the Greek and Roman Empires. The rise of both empires was associated with the access to silver mines and the lead integrated with silver. The fall of the civilizations was associated with depletion of the mines and/or decline of the upper class and rulers due to lead poisoning induced general insanity and sterility from lead components of cosmetics, water distribution systems, cisterns and sapa production and consumption (grape juice simmered in lead kettles then added to wine) (Patterson, 1980). Lead poisoning is treatable with medication and preventable by the identification and abatement of the source and/or the exposure pathway.

EFFECTS

The individual effects of lead poisoning vary widely - from temporary dizziness to death. The extent of lead effects are dependant on duration and frequency of exposure, exposure route, the concentration of the dose and the age of the person exposed. Acute exposure effects are frequently reversible with time and/or proper treatment. These effects, listed in Table I. can be quite similar to many diseases and may not, therefore, be attributed to lead poisoning. Some acute effects are loss of appetite, headache, gastritis, malaise, irritability, and reversible kidney damage. Chronic exposure effects can be irreversible, carcinogenic, teratogenic, mutagenic and deadly. Chronic effects include sclerosis of the liver and/or vascular system and interstitial fibrosis. Low lead exposure levels may result in increased blood pressure, impaired neurotransmission and immune system function. Other low level effects include decreased stature or growth, decreased hearing acuity, reduced birth weight, decreased ability to maintain a steady posture, and diminished IQ scores. Severe toxicity from high exposure doses can lead to abortion, neonatal mortality and morbidity, sterility, coma, convulsions and death.
Although lead can affect every system in the body, the major organ systems affected are the central nervous system (CNS), blood system and kidneys. In the CNS lead poisoning leads to encephalopathy accompanied by severe cerebral edema, increase in cerebral spinal fluid pressure, proliferation and swelling of endothelial cells in capillaries and arterioles, proliferation of glial cells, neurological degeneration and areas of focal cortical necrosis in fatal cases (Sax and Lewis, 1989 page 2096).

In a school setting the results of lead exposure (other than noticeable physical disabilities) manifest themselves in several ways, usually as neuropsychological or cognitive impairments and/or behavior problems. Neuropsychological impairments include lower IQ scores and Attention Deficit Disorder. Behavior problems exhibited include improper conduct, inattentiveness, passivity and hyperactivity. While lead exposure is not always recognized as the cause of these problems, studies on children of known lead exposure have attempted to delineate the relationship between the exposure level and the level, or degree, of the manifestation of the subsequent effect. Some recent studies that address the exposure level/effect issue are presented in Table II and the following summaries.

Wigg et al. (1988) - The Port Pirie Cohort Study. In an Australian lead smelting community, 723 infants were tested for lead blood levels antenatally, at birth, six and fifteen months and two years. Children with estimated lead blood levels of 30 ug/dL at the age of two years had a deficit of 3.3 points (3.2%) on the Bayley Mental Development Index.

McMichael et al. (1988) - The Port Pirie Cohort Study, continued. Children with estimated lead blood levels of 30 ug/dL at the age of four years had a deficit of 7.2 points (6.7%) on the McCarthy General Cognitive Index.

Baghurst et al. (1992) - The Port Pirie Cohort Study, continued. In a group of 494 of the original 723 children, seven-year-old children were administered the Weschsler Intelligence Scale for Children (WISC-R). The data indicated that for an increase in blood lead concentration from 10 ug/dL to 30 ug/dL (average concentration from fifteen months and annual reading to four years) the estimated reduction in children's IQ ranged from 4.4 to 5.3 points (4-5 %) at age seven. It was concluded that low level exposure during early childhood is inversely associated with neuropsychological development through the first seven years of life.

Sciarillo et al. (1992) - Children with lead blood levels >15 ug/dL had significantly higher mean Child Behavior Checklist (CBCL) Total Behavior Problem Scores (TBPS) and Internalizing and Externalizing Scores than the controls. For each unit increase in blood lead levels there was a 0.18 point TBPS increase. In the high exposed group the TBPS was 5.1 points higher and the children were 2.7 times more likely to have a TBPS in the clinical range. The author concludes that the study results support the belief that undue lead exposure in early childhood may have an influence on the prevalence of juvenile delinquency.

Sachs (1981) - Contrary to previous findings, Sachs found the absence of neurological sequelae following symptomatic lead poisoning. Testing several years after diagnosed lead
poisoning revealed no hypertension, renal problems, neurological problems and anormal EEGs. Psychological tests revealed minimal differences between patients and controls.

EXPOSURE PATHWAYS AND SOURCES

Lead may enter the body through a variety of pathways and from multiple sources, thus estimating total lead intake is complex. Multiple low level inputs can result in an aggregate exposure at a significant level. Exposure of children to lead is greater than adults due to behavioral and metabolic differences and the higher frequency of pica (the craving for ingestion of non-food substances such as lead paint chips) in children (Oskarsson, 1989). Exposure pathways include inhalation of contaminated air and dust and ingestion of contaminated water, food, soil and dust. Dermal contact usually leads to inhalation of contaminated dust or ingestion of the contaminated soil from hand-to-mouth activity, not to direct dermal adsorption.

The most common source of high doses of lead exposure for preschool children is lead-based paint produced before 1940. The manufacture of paint containing more than 0.06% lead was banned in 1978 by the Consumer Product Safety Commission. Lead paint chips, flakes, dust or objects they contaminate are easily inhaled or ingested via normal hand-to-mouth activity of small children. Children who live in older houses, particularly if the houses are undergoing renovation, are at high risk for lead poisoning from various pathways.

Soil and dust contaminated with lead from paint, alkyllead fuel combustion exhaust or industrial emissions are sources of lead inhaled or ingested by children. Roadside soil, metal mine tailings, soils adjacent to old houses painted with lead-based paint and soils adjacent to smelters may have levels of 10,000 to 60,000 ppm lead. Acid rain mobilizes the lead in the soil into surrounding water bodies. Ingestion of fruits, vegetables or other food contaminated with lead is a frequent pathway of lead exposure.

In drinking water, lead contamination occurs in the distribution and storage systems more than in the supply source. Sources of lead contamination within a distribution system include lead pipes, lead-soldered joints in copper plumbing, lead-soldered joints and tanks in drinking water fountains and coolers, faucets and fixtures. Older buildings are more susceptible to lead contamination due to type of plumbing fixtures popular at the time of construction. Cisterns used in rural areas to collect and/or store water are susceptible to lead contamination particularly if the rain water is acidic.

Lead exposure from food can come directly from contaminated food itself or from food handling (the cooking water, utensils used to store, prepare or serve food). Acetic food or beverages can leach lead from lead glazed pottery and thus make the lead available for ingestion. The lead soldering in cans is a frequent source of lead ingestion.

PREVENTION

C.C. Paterson (1980) has warned "that the mining and smelting of lead and dispersal of manufactured leaded products within the human environment is actually a monumental
crime committed by humanity against itself and proposed a ban on such activities. While a ban would be effective, less drastic lead poisoning prevention measures are more realistic. In light of new data which indicate significant adverse effects of lead exposure in children at blood levels previously believed to be safe, the U. S. Department of Health and Human Services, Center for Disease Control and Prevention (CDC) now promotes the goal of all lead poisoning prevention activities should be to reduce children's blood levels below 10 ug/dL (CDC, 1991).

The CDC (1991) outlines several mechanisms for prevention of lead poisoning in young children which school officials need to be aware of to determine their role and participation. Public health agencies should:
1. provide blood screening services
2. identify exposure patterns and high-risk populations
3. implement a primary prevention plan
4. coordinate prevention activities with other agencies
5. provide followup services for poisoned children

The CDC recommendations for public housing agencies are as follows:
1. provide housing and environmental services to affected families
2. enforce lead hazard code requirements
3. assist public health agencies in lead hazard education of all concerned with housing
4. use regulations and abatement techniques to increase safe housing

The CDC recommendations for environmental agencies are as follows:
1. participate in interagency efforts to prevent lead poisoning
2. address environmental lead hazards with a multimedia approach
3. monitor, regulate, license and enforce activities to reduce environmental exposure to lead

School systems can play a pro-active role in lead poisoning prevention by identifying and eliminating possible lead hazards in the children's home and school environment. Many of the hazard identification and elimination actions can be performed by existing state and federal agencies upon request. Such actions may include the following:
1. test water fountains for lead components
2. test water in fountains for lead concentrations and compare with municipal water supplies
3. determine if lead-based paint has been used in older school buildings as well as homes in the area
4. determine if your geographic area has metal mining, smelting, processing or other related activity now or in the past
5. determine if school playgrounds have been contaminated by metal activities
6. educate children and parents concerning the sources, pathways, hazards, effects and prevention of lead poisoning
7. communicate with health, housing and environmental officials concerning lead hazard identification, treatment and elimination programs in your area
8. encourage good personal health habits, especially frequent hand washing  
9. discourage children from putting objects in their mouths  
10. be aware of the symptoms and effects of lead exposure to assist in diagnosis and treatment with the assistance of health professionals  

CONTACTS FOR ADDITIONAL INFORMATION  

Many federal, state, county and local agencies can provide information, educational material and services pertaining to lead sources, exposure and poisoning. For your convience, some are listed here.  

U. S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, Atlanta, Georgia 30333  
404/329-3235  
404/639-3311  
404/488-7330  
404/332-4559 - Traveler's Hotline  

RCRA/Superfund Hotline - 1-800-424-9346  
They are concerned with identification, location and remediation of contaminated soil and water and will answer questions and/or send information requested.  

HUD Hotline - 1-800-RID-LEAD (1-800-743-5323)  
They will provide information about sources, identification, location and abatement of possible lead-contaminating products in houses.  

National Lead Information Center - 1-800-LEAD FYI (1-800-532-3394)  
They will provide information about lead paint removal.  

National Poison Control Center Hotline (24 hour) - 1-800-522-4611  
They will provide literature, including a compilation of references and abstracts, or give information over the telephone on consumer protection, lead poisoning hazards and prevention.  

American Water Works Association - 1-800-926-7337  
They will provide information on water testing, regulations, treatment, standards etc. Their Small Systems Program may be especially useful to rural communities.  

Local, county and state health agencies.  

County or state extension programs.  

SUMMARY  

Although preventable, lead poisoning is an all too frequent cause of renal, blood system and neurological damage in children which may be treated but may, also, have
permanent effects. There are many lead sources and various exposure pathways. The school system is involved with lead poisoning symptoms and effects in special educational settings for neuropsychological and behavioral problems. Many agencies can provide educational material, information and services to schools concerning lead exposure problems. Schools systems can play a pro-active role in lead poisoning prevention by identifying and eliminating possible lead hazards in the children's homes and school environment. School personnel should be familiar with the symptoms of lead exposure to assist in diagnosing and treatment of the disease as early as possible.

REFERENCES


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<tr>
<th>EXPOSURE</th>
<th>EFFECT</th>
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<tbody>
<tr>
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<td>Headache</td>
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<tr>
<td></td>
<td>Gastritis</td>
</tr>
<tr>
<td></td>
<td>Malaise</td>
</tr>
<tr>
<td></td>
<td>Irritability</td>
</tr>
<tr>
<td></td>
<td>Reversible kidney damage</td>
</tr>
<tr>
<td>Chronic</td>
<td>Sclerosis of the liver</td>
</tr>
<tr>
<td></td>
<td>Sclerosis of the vascular system</td>
</tr>
<tr>
<td></td>
<td>Interstitial fibrosis</td>
</tr>
<tr>
<td>Low Level Exposure</td>
<td>Increased blood pressure</td>
</tr>
<tr>
<td></td>
<td>Impaired neurotransmission</td>
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<tr>
<td></td>
<td>Impaired immune system function</td>
</tr>
<tr>
<td></td>
<td>Decreased stature or growth</td>
</tr>
<tr>
<td></td>
<td>Decreased hearing acuity</td>
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<tr>
<td></td>
<td>Reduced birth weight</td>
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<tr>
<td></td>
<td>Diminished IQ scores</td>
</tr>
<tr>
<td>High Level Exposure</td>
<td>Abortion</td>
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<tr>
<td></td>
<td>Neonatal mortality and morbidity</td>
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<tr>
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<td>Coma</td>
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<tr>
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<td>Convulsions</td>
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<tr>
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<td>Sterility</td>
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<td>Death</td>
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TABLE II  STUDIES OF LEAD EXPOSURE EFFECTS ON CHILDREN

<table>
<thead>
<tr>
<th>STUDY</th>
<th>CHILDREN'S AGE</th>
<th>LEAD LEVELS (ug/dL)</th>
<th>ASSESSMENT TOOL*</th>
<th>RESULTS</th>
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<tr>
<td>Sciarillo et al., 1992</td>
<td>2 -5</td>
<td>&gt; 15</td>
<td>CBCL-TBPS</td>
<td>0.18 point increase/lead unit increase</td>
</tr>
<tr>
<td>Sciarillo et al., 1992</td>
<td>2 -5</td>
<td>&gt; 15</td>
<td>CBCL-TBPS</td>
<td>5.1 points higher</td>
</tr>
<tr>
<td>Sciarillo et al., 1992</td>
<td>2 -5</td>
<td>&gt; 15</td>
<td>CBCL-TBPS</td>
<td>2.7 times more likely to be in clinical range</td>
</tr>
<tr>
<td>Wigg et al., 1988</td>
<td>2</td>
<td>30</td>
<td>BMDI</td>
<td>3.3 point deficit (3.2 %)</td>
</tr>
<tr>
<td>McMichael et al., 1988</td>
<td>4</td>
<td>30</td>
<td>MGCI</td>
<td>7.2 point deficit (6.7%)</td>
</tr>
<tr>
<td>Baghurst et al., 1992</td>
<td>7</td>
<td>10 - 30</td>
<td>WISC-R</td>
<td>IQ reduction of 4.4 - 5.3 points (4-5%)</td>
</tr>
</tbody>
</table>

* Assessment Tools
CBCL-TBPS = Child Behavior Checklist - Total Behavior Problem Scores
BMDI = Bayley Mental Development Index
MGCI = McCarthy General Cognitive Index
WICS-R = Wechsler Intelligence Scale for Children
REGIONALIZED PARENT AND STAFF DEVELOPMENT: THE RURAL CALIFORNIA MODEL (RRCM)

Introduction

Through the re-authorization of Public Law 94-142 with Public Law 101-476, the Individuals with Disabilities Act (IDEA) in 1991, each state was delegated to form a Comprehensive System of Personnel Development (CSPD). The CSPD's primary focus is for the preparation of personnel to educate children with disabilities.

California responded by forming a CSPD Advisory Committee, commonly called CSPDAC. By instituting CSPDAC, California established a mechanism for information, dissemination, comments, and funding of personnel development in Special Education. The state, using the ideas of regionalization, was divided into twelve regions as reflected in Figure 1. Each region formed a Regional Coordinating Council (RCC). Regionalization is defined as an established mechanism that incorporates a given number of special education districts or SELPA's (Special Education Local Plan Areas) for the purpose of providing coordinated inservice and parent education.

Regional Coordinating Council (RCC)

The twelve Regional Coordinating Councils have membership from school personnel, community members, parents, institutions of higher education (IHE's), and other educational advocates. Each RCC has one representative on the statewide CSPDAC, which has twelve additional members from parent groups, Institutions of Higher
FIGURE 1
CSPDAC REGIONS
Education, the Advisory Commission on Special Education, the Commission on Teacher Credentialing, the California Teacher's Association, and others. The purpose of the state CSPDAC is to advise the Special Education Division of the California State Department of Education on issues related to personnel development. The organization plan is represented in Figure 2.

In 1990 as part of the evolution of responsibilities of the RCC's, regionalization of California's Strategic planning in special education was implemented. Currently, each region including Region H. has developed their strategic goals for 1993-1994. These goals, combined with the other 11 Regional Coordinating Council goals, are synthesized into a unified California Strategic Plan for the 1990's. This follows the concepts of site-based management that is so popular in public regular education.

The Regional Coordinating Councils have proven a very effective and cost-efficient way of providing quality parent and special education inservice training. As a result of the strained and restricted funding in the state, the regionalization approach is very cost-effective. This collaboration has created a unified approach to serving parents and special education personnel through the same training opportunities.

Region H Regional Coordinating Council

Region H Coordinating Council is located in the center of the State of California. The area is a region that is geographically diverse and is rural in every sense of the word. The region encompasses the San Joaquin Valley and the Sierra Mountain communities.

The San Joaquin Valley is predominant agricultural with the ranching area of Kettleman Hills receiving population sparsity funds from the state. The student population in the valley consist of at least 50% of the special education students being of Hispanic origin.
FIGURE 2

STATE OF CALIFORNIA
COMPREHENSIVE SYSTEM OF
PERSONNEL DEVELOPMENT (C.S.P.D.)

California Department of Education
Division of Special Education and
Special Projects

CSPD Advisory Committee
(CSPDAC)

Twelve CSPDAC
Regional Coordinating
Councils (R.C.C.'s)

Parents, CAPSE, UTLA,
CTA, CTC, ACSE, SEACO,
SELPA, SECACNOC, etc.

CSPD
Plan Team
with primary language of Spanish. There are other minority populations as well.

The mountain area to the East of the valley is predominantly national forest, which includes Yosemite National Forest. This area has all of the same dynamics of isolation that is often seen in areas of Alaska and Wyoming, such as transportation problems during the winter.

These geographic and cultural diversity issues create additional challenges for the Region H Coordinating Council when developing parent and special education training conferences and workshops.

Region H is composed of eight SELPA's with each Selpa having one SELPA representative and one CAC Representative, one IHE, and other identified agencies, such as Developmental Disabilities Service Area Boards. The eight SELPA's are: Fresno County, Fresno Unified, Clovis Unified, Madera/Maraposa County, Merced County, Stanislaus County, and TriCounty (Amador, Calaveras, and Tuolumne). Of the two regional IHE's, the only one who participates is California State University, Fresno. Among the private colleges, the Regional Coordinating Council often collaborates with Fresno Pacific College.

How to Establish and Regional Coordinating Council on a Shoestring

The political dynamics of establishing a coordinating council for personnel development in Special Education should be considered when exploring the possibility of establishing a more regionalized delivery system. This should include consideration of the goals and direction of the state department of education, goals and objectives of the state strategic plan, statewide commitments to a system change, and a commitment of all school districts to the regionalization concept.

When considering dividing the state into regions, geographic considerations should be given to physical geography, ethnography.
populations and cultural and ethnic diversity. These determinants are critical when developing an effective Regional Coordinating Council.

In the allocation and accountability of funds for a regionalized system, creativity plays the major role. The budget process is necessary for the systematic application of funds. This systematic application may be based on Pupil Count, Base Grant or a combination of the two. The Regional Coordinating Council applies for funds through the state-wide CSPD, which can be either through a competitive process or the more effective process of dividing the funds equably through all regions of the state.

The accountability for the allocated and expended funds for personnel development is through the customary End of the Year Academic Report. This report reflects SELPA matching funds and in-kind services. The statewide CSPD committee then accepts the report and integrates it into the state annual report.

Each Regional Coordinating Council operates autonomously within the legal limit of state and federal governing codes. All of the Councils should operate in the same manner throughout the state. Specific meetings are regularly scheduled throughout the year and these can be either in the same geographic location or rotated throughout the region.

Parent and Special Education Collaboration Pragmatics

Parent involvement within the Regional Coordinating Council is on an equal status of the professional representing the SELPA, IHE, and other agencies. Including the parent on this level, will create a regional council that is destined to achieve success. In all likelihood, not having the parent on this level will set the tone for a council that is dictated by special education professionals. Ultimately, the council
will lose sight of their primary mission of serving children with disabilities.

In order for the Council to be effective, an open interchange of parent and professional development is necessary. This interchange creates equal development of parent and professional inservice education and training's. These training's can be held throughout various school sites within the region.

To aid in the development of the inservice education and training sessions, the Strategic Plan must be established and implemented before the training can begin. Strategic Plans include not only preservice and inservice strands but also includes the parent training strand. This parent training strand includes identified areas of parental need and interest.

Regional Coordinating Councils also network with other state advisory groups and boards. These may include advisory commissions, state school boards, both legislative houses of government, and any other state organizations that the council deems necessary for accomplishment of its goals.

**Conclusion**

In conclusion, the regionalization of Comprehensive Personnel Development in Special Education provide an effective and cost-efficient mean of delivering training for parents and professionals. The Regional Coordinating Council provides the forum for facilitating open dialogue between parents and professional. This forum also provides insight for the IHE's in contemporary issues and challenges that face each school district within their region. With parent, school district and IHE collaboration and coordination, the regionalization of staff development can be a reality.
ADHD TRAINING MODULES FOR RURAL HEALTH CARE PROVIDERS, EDUCATORS AND PARENTS

INTRODUCTION

Although what we know today as ADD/ADHD (attention deficit disorder/attention deficit hyperactive disorder) has been investigated for at least the last 50 years, an explosion into every facet of the disorder has occurred during the last decade. The current literature of disciplines such as medical, educational, etc., is replete with information concerning ADD. This multidisciplinary view of the disorder is necessary to define ADD, to suggest research directions, and to plan appropriately for children with this disorder when the disorder leads to learning and behavior problems (Lerner, 1993). The purpose of this paper therefore is to provide interested parties with a review of selected issues involving medical, parent, and educational interventions and to formulate some sample training modules that are built on what is believed to be best practices in the educational and medical fields today.

HISTORY AND ISSUES OF DEFINITION

Although the disorder that we term today as ADD has evolved in a somewhat circuitous pattern, behavioral manifestations have always been the very core of the definitions of the syndrome. Identification of the entity can be traced to the late nineteenth century with the first descriptions of behavioral disorders occurring as sequelae of an insult to the brain (Kavanagh & Truss, 1988). If symptoms such as inattention, poor impulse control, hyperactivity, etc. followed a head injury or a central nervous system infection, the etiology seemed obvious. Consequently, it is not surprising that both medical and lay opinion alike would refer to such sequelae as brain damage.

Over time, those behavioral manifestations that were associated with brain injury, came to be observed in children who had no history of such an insult. In keeping with the popular theories of that era, the damage to the central nervous system (CNS) was considered so minimal that its only manifestations were the behavioral syndrome, hence the term Minimal Brain Damage. However, by the early 1960's, the behavioral
syndrome and the frequently associated occurrence of learning disability were arbitrarily linked together under the rubric of minimal brain dysfunction (MBD). Although the term was mainly associated with the psychiatric literature, it was rapidly adopted by other disciplines.

The early literature on ADD focused on the hyperactivity component of the syndrome. Current terminology emphasizes the primary aspects of attentional dysfunction as the principal behavioral manifestation of the syndrome. Consequently, the decades of the 60's and 70's provided the impetus to clarify MBD and in so doing necessitated the disentangling of the behavioral symptoms from those cognitive aspects that are best considered in the domain of learning disability.

Prior to 1940, there were really only three major categories for children with problems in society in general: mental retardation, deaf and blind, and the physically handicapped. During the 40's and 50's the syndrome of minimal brain dysfunction (MBD) was studied extensively by many disciplines, hence the emergence of the terms dyslexia, dysgraphia, dyscalculia, etc. These terms eventually helped to define the field of learning disabilities. Strauss and Lehtinen (1947) looked at social behaviors of children with MBD. The Strauss triad of disinhibition, distractibility and perseveration was used to diagnose children with attention and social problems. These terms were then altered to include children with hyperactivity, distractibility and impulsivity and the term hyperkinetic as developed. In 1980, the term ADD was coined to describe these children and to focus on ATTENTION as the root of the disorder. Following close behind was the term ATTENTION DEFICIT HYPERACTIVITY DISORDER (ADHD) which was proposed in 1987 to suggest that both attention and hyperactivity were important in describing the disorder. The DSM-III and the DSM-IIIIR differ in their definition of the problem. The DSM-III offers two dated: ADD W/H and W/O. The first defines attention deficit disorder with hyperactivity; the second, attention deficit disorder without hyperactivity. ADD W/H was diagnosed using criteria similar to the Strauss guidelines generated in the 1940's. ADD W/O included those students with learning disabilities where attention was the central processing function that was not intact; social behavior was NOT a presenting condition. DSM-IIIIR uses the term ADHD as the major diagnostic category, but allows for ADD without hyperactivity (undifferentiated ADD) as a subcategory.
The DSM-IIIR is currently in use and presents hyperactivity, impulsivity, and distractibility as areas for diagnosis of ADHD. The diagnostic procedure includes history and observations as well as physical, neurological and psychological examinations. The presenting conditions must be chronic and pervasive, not situational or temporary; underlying the behavior is a neurological disorder (McBurnett, Lahey, Pfiffner, 1993). The brain mechanism thought to be dysfunctional is the reticular activating system/locus ceruleus. If this part of the brain is functioning properly, it allows an individual to screen out extraneous stimuli. Consequently, the current definition most quoted is "a disorder of developmentally appropriate degree of inattention, impulsiveness, and overactivity which arises in early childhood and is relatively chronic throughout adolescence. The disorder is significantly pervasive and appears to have a biological predisposition. The disorder is not the direct result of gross brain damage, psychosis, autism, or severe/profound mental retardation" (Barkley, 1990).

Estimates of the incidence of ADD children in our public schools today range from 3-20% of the school aged population, K-12. There is an increasing reliance of general educators to assume the responsibility for ADD children (Shaywitz & Shaywitz, 1992). This will become more pronounced as the state adopts an INTEGRATED EDUCATION MODEL, (WV Department of Education, 1992) which will eventually place all mildly handicapped children in the regular classroom.

West Virginia is experiencing the same challenges as the rest of the country in trying to provide the most effective and comprehensive programming for ADD children. The majority of referrals within the system today center around children with ADD like symptoms. It is not a disorder that is specific to a particular setting because it impacts the educational, social and family life of the ADD child. Diagnosis and treatment require a team approach that utilizes the expertise of physicians, counselors, psychologists, nurses, parents, and both regular and special educators.

Consequently, there is an urgent need for professionals representing various disciplines to collaborate in sharing their knowledge and successes. This need is intensified because of the rural nature and the rugged terrain of the State of West Virginia. The major training
facilities, both educational and medical, are located at West Virginia University. The University is located in the northern part of the state, on the Pennsylvania border. It is mandated to serve over half of the counties in the state. Mountains and winter weather make driving during half of the year extremely difficult. Hence, the need for training packets or modules that can be shared and utilized across the state. These modules will include the most promising interdisciplinary training model with effective methodologies and supporting training materials. These modules could be utilized in any existing network in the most rural of areas.

PL 94-142 became a federal mandate almost 19 years ago, but provisions for an appropriate education for special needs children continues to be challenging. In July, 1991, the State of West Virginia provided a legal impetus for teachers, psychologists, medical personnel, parents and others to work together to provide appropriate services to ADD children. It is hoped that training packages that are to be developed and refined in module format will be inclusive and representative of the interdisciplinary focus that is necessary. Examples of sample modules dealing with medical diagnosis, school and home follow.

**MODULE 1**
Definition, Diagnosis, and Medication

Background and Current Definition
Diagnostic Criteria
Medications and their Impact

Policy 2419: Regulations for the Education of Exceptional Students (West Virginia Department of Education, 1991) categorizes ADHD under the rubric of Other Health Impaired. As a result of this categorization, the family physician or pediatrician is required to play a major role in the assessment process for children with ADHD. The family physician or pediatrician also initiates the comprehensive treatment program with counseling and stimulant medication, and coordinates the use of special education, mental health, and other resources as needed (Hughes, Goldman, & Snyder, 1983).

The purpose of this module is to clarify the physician's role in the assessment process and to explain and discuss the diagnostic criteria and
medication that physicians use in diagnosing and treating ADHD. The module will present a brief historical background, a current definition and the diagnostic criteria from the DSM-III-R Manual (American Psychological Association, 1987) will be illustrated and explained and discussed. The most common medications (methylphenidate, dextroamphetamine, and ritalin) and their impact on the child in various settings will also be examined (Levy, 1993; Fox & Rieder, 1993; Dupaul & Rapport, 1993; Ahmann, Waltonen, Olsen, Theye, Van Erem & Laplant, 1993).

MODEL II: EDUCATION

This module involves the educational component of the ADHD training and addresses the following four areas:
1. Implications of Education
2. Assessment
3. Service Delivery
4. Intervention

This module will also provide the educator, parent, and medical caregiver information that will help bridge the gap of communication that presently exists among all three parties. Continuous communication problems are especially prevalent in rural communities where the provision of health care as well as support for parents and the school system is almost nonexistent. The primary focus will be on developing a working relationship between the three parties and providing assistance to the school and family.

1. **IMPLICATIONS FOR EDUCATION:** Children with ADHD in the regular classroom face a risk of school failure two to three times greater than that of other children without disabilities but with equivalent intelligence (Rubinstein & Brown, 1981; Zentall, 1993). Since teachers play an important role when working with children diagnosed as ADHD, training and education is essential to their success.

2. **ASSESSMENT:** Typical practice in research and the clinical assessment of ADD involves teacher and parent rating scales, observational techniques, and interviews (MCKinney, Montague, & Hocutt, 1993). In West Virginia, the identification of ADHD is not only the responsibility of the school system, but for IDEA, it requires a physician's examination and signature verifying that the disorder exists. Many school systems have just recently developed a consistent process for educational identification, but the verification by a physician is much
more difficult due to the lack of availability and knowledge that is particularly common in rural areas. In addition, consistent monitoring of the effects of prescribed medications has been nonexistent also.

3. SERVICE DELIVERY: Since September 1991, when the U.S. Department of Education issued a policy clarification on issues involved in the education of students with ADD, local agencies have become more aware of statutory requirements regarding assessment of children with ADD under either Section 504 of PL 93-112 or PL 94-142, the Individuals with Disabilities Education Act (IDEA) (Davila, Williams, & McDonald, 1991; McKinney, Montague, Hocutt, 1993). The majority of students are served in the regular classroom where modifications are made to help ensure success. Students with disabilities can be served in the regular classroom with additional support from special education programs or they can be placed in special education classroom on a full-time basis. The regular education placement often becomes an issue due to the lack of understanding of the disorder.

4. INTERVENTION: The need for appropriate intervention continues to surface in all settings, even in special education classrooms. Clinical psychologists, neuropsychologists, and physicians conducted most of the reported research in laboratory clinic settings (including clinic-based classroom); only 21 of the 137 studies reported on interventions in actual classroom settings (Fiore, Becker, Nero, 1993). These limitations often result in the development of strategies that do not necessarily work in an actual school environment. In actuality, the expectation should be that the appropriate interventions will be selected, agreed upon, and consistently used by all instructional personnel working with the student (McCarney, 1989).

MODULE III: HOME

This module involves the home component in which the child lives and will consist of the following:

1. Implications of the Home
2. Intervention
3. Coping Strategies for Parents

Since there is no cure for ADHD, the primary focus of this module will be to assist parents by providing support services in regard to the medical aspect in conjunction with the school as it pertains to the educational needs of the child. The main therapeutic objective for the child with ADHD and their parents, therefore, is to teach the family methods of coping and compensating for this ongoing learning and

1. **IMPLICATIONS OF HOME:** The child identified as ADHD not only has difficulty in school, but also exhibits problems at home. If these problems are treated by individual, behavioral, group, or family therapy without addressing the reasons for the problems (the child's disability), no progress will be made (Silver, 1989). In rural areas such as West Virginia where the availability of services for families is severely limited, addressing the problems in an appropriate manner becomes very difficult.

2. & 3. **INTERVENTION AND COPING STRATEGIES:** Educational intervention is important but consistent intervention at home is also important to ensure overall success for the child. Many parents are in need of assistance with parenting skills when dealing with authority struggles as well as sibling disputes. Youngsters often exhibit inattentiveness, impulsivity, and physical restlessness which interferes with good behaviors. Implicit in this conceptualization is the need to restructure environmental demands and contingencies so as to create a "prosthetic" home and school environment that allows the child with ADHD to develop compensatory skills for coping with this chronic and pervasive behavioral disability (Anastopoulos, DuPaul, Barkley, 1991).

This module will attempt to provide interventions and strategies that may be used with parents to improve their relationship with their children.
REFERENCES


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AN INSERVICE AND PRESERVICE MODEL FOR MEETING THE NEEDS OF RURAL POPULATIONS: PREPARING TEACHERS FOR THE REAL WORLD OF DIVERSITY

INTRODUCTION

While much has been written about multicultural education as it relates to preservice and inservice education and its implementation in public school classrooms, other than among rural educators, little has been written about the differences between rural and urban education. Far too often educational textbooks are written as if education is urban education with some modifications for rural education. While the reform movements of the eighties may have benefitted urban schools, they have only added to the problems of the rural schools. Since most movements were in the direction of national standards and were urban oriented, they often failed to recognize or acknowledge the uniqueness of rural education. Seldom was rural education treated as an educational entity with specific needs, but rather as a troublesome area that had to be brought up to the idealistic urban standards (Bloodsworth, 1993). Consequently, rural education has become a second thought as we develop teachers' skills. This article is written to describe a model developed in two state supported institutions which was designed to meet the needs of both preservice and inservice teachers who would, most likely, teach rural students during the teachers' professional career. The utility of this model is further enhanced by its time and cost effectiveness.

PROBLEMS WITH EXISTING PROGRAMS

There are a number of problems that might be addressed by the authors of this paper. Among these problems are: the difficulty in financing physical facilities that the state may mandate as standards are raised; the difficulty in funding salaries of new, appropriately certified teachers required as the result of raised standards; and the lack of expertise on the part of administrators and curriculum planners as they design instructional programs to meet both the needs of the unique characteristics of rural students and the mandates of in these raised standards.
As the reform movement brings about more standardization and higher standards, the rural schools get caught in a squeeze. The battle becomes simply to survive, rather than to achieve excellence as instructional programs are developed. As new courses are added to the curriculum in order to meet these identified higher standards, all too often the needs and characteristics of rural students are overlooked or unknown as the courses are developed. Therefore, these authors have chosen to address these oversights. As teacher educators, our realm of knowledge and responsibility empowers us to make our greatest impact upon the construction of appropriate courses which would address the special needs of rural populations (Fitzgerald & Bloodsworth, 1993a).

CHARACTERISTICS OF EDUCATION MAJORS AND OF RURAL PUBLIC SCHOOL STUDENTS

In our current effort to restructure the educational systems within the nation, serious consideration must be given to rural education (Fitzgerald & Callihan, 1992). The unique learning characteristics of rural students has not been given proper consideration (Fitzgerald & Bloodsworth, 1993b). Education majors from rural backgrounds are frequently totally unaware of their own learning styles, much less the learning style of those of rural public school students they will teach during their teaching career. These characteristics are very similar, and in many instances are identical. Learning theory supports the notion that only by internalizing specific concepts do they have meaning. The importance of this notion is that preservice and inservice teachers understand the importance of the characteristics of rural learners. It is through making adaptations in their own coursework that they can consequently develop appropriate coursework for rural public school students designed to meet their unique characteristics (Bloodsworth & Fitzgerald, 1993a).

Potterfield and Pace (1992) have identified characteristics of rural students in the southeastern section of the United States. Among the notable ones are the characteristics listed below.

Rural learners are:

1. likely to be global learners
2. likely to have a strong preference to cooperate with others
3. likely to see learning as a social experience
4. likely to have an aversion for individual recognition
5. likely to have difficulty with arbitrarily set time frames.
6. likely to prefer to have information transmitted orally and in a social setting.
7. likely to exhibit a tendency toward subjective conclusions

8. to have a sense of powerlessness concerning events and the environment

MODIFICATION OF COURSE WORK FOR EDUCATION MAJORS FROM RURAL BACKGROUNDS

The following modifications have been made in the course work offered for students enrolled in both undergraduate and graduate courses as well as in-service contract courses and workshops (Bloodsworth & Fitzgerald, 1993b). The modifications are matched on a one to one correspondence with the learning characteristics of rural students as listed above.

Global learning - A very detailed syllabus for each course, describing the broad objectives and the conclusiveness of the content and activities is distributed in each course. In addition, the introduction to each class session in included which describes the "larger picture" for that session. Continual emphasis is placed upon the relationship of concepts in the course being taught to the concepts being addressed in other courses in the program. A summary for each session in included to once more emphasize the relationship between components of the activity.

Preference for cooperating with others - Small group work is utilized during regular class sessions. When students are assigned a project, the use of teams is incorporated in the assignment. Oral presentations are regularly employed in the course work. Emphasis is placed upon the sharing of materials and professional sources.

Aversion for individual recognition - Team work is assessed with a common grade awarded. Any personal recognition, whether oral or written, is done in private. The emphasis is placed upon group recognition.

Perception of learning as a social activity - The interaction between professor and students is done on an informal basis, thus lending a social atmosphere to the class. Humor is frequently used when drawing analogies from the course content. A warm, supportive classroom climate is constantly maintained.

Difficulty with arbitrarily set time frames - The syllabus includes an overall description of the work required and the due dates, thus allowing students to plan their own schedules. Students may work ahead, therefore allowing them to set their own pace. Major quizzes may be rescheduled by the entire class in order to avoid overload with other course quizzes. Students are encouraged to develop both negotiating and managerial strategies.
Preference for orally transmitted information - Discussion is included in every lesson. A multimedia approach is used in each course. Video tapes, cassette tapes, guest speakers, slide presentations and demonstrations are a few of the examples of this approach. Cooperative group research is shared orally with the remainder of the class members.

Tendency toward subjective conclusions - Students are urged to investigate, gather data, then make decisions based upon knowledge and experience. Concepts are related to students' life experiences. Data related to course information is collected from local news releases to add data based upon real experiences in the students' environment.

Sense of powerlessness - The majority of course requirements are in the students' court, not the professor's. Students have many choices about how to approach, organize, and present assignments. Students may negotiate grades on quizzes. Students are encouraged to submit data supporting their position and the grade is adjusted if the data is appropriate. Emphasis is placed upon the learning role of everyone in the classroom, students and professor(s) alike.

PRACTICAL APPLICATIONS OF THE MODEL

These modifications can be made in any undergraduate or graduate course, since the emphasis is placed on classroom climate, social cooperative skills, and teaching strategies. Any course content can be modified using these suggestions as well as other related modifications which will be triggered by these ideas. Cost is insignificant and any increase in planning time is negligible. Textbooks currently available on the market can be modified by the professor as the content is presented and discussed. These modifications make the model very attractive as we consider time, money, and resources in curriculum planning.

SUMMARY

Colleges of Education are in the enviable position to make major contributions by included the needs of rural education as a legitimate entity in their curriculum and in their teaching of pedagogy. Authors of educational textbooks would do well to make the distinction between rural and urban education. There is a need for the cessation of writing about education only in terms of urban education.

If improvements are to be made in rural education, these improvements must be based on rural education. We cannot improve it by applying urban standards. Rural education is not an afterthought. It has only been assigned that role by educators themselves. It is high time that we recognize rural education for what it is -- education that is as legitimate as, but quite different from urban education.
REFERENCES


Fitzgerald, D. & Bloodsworth, G. (1993a) Meeting the needs of urban and rural populations: The professor's role in fashioning the program. Paper presented at the Association of Teacher Educators Mid-America Regional Conference, Wichita, Kansas, April, 1993.


WORKING TOGETHER: WHEN DEATH COMES TO SCHOOL

ABSTRACT

Dealing with death is a complicated matter that admits no easy resolutions. The focus of this project is to guide administrators, teachers, school personnel, parents, community support persons, families, and students in making decisions that ease the passage of the crisis of dealing with death in their school setting. Hopefully, there will be a time to develop a school plan before the crisis rather than school action procedure after the experience.

Should the school be closed and students left to get support from a home where the parent may be working or should the school assume a nurturing role during a school crisis? That choice will determine the course of action for the school setting and the time for the use of the materials in this project.

By being prepared to cope with death that impacts on a student, a class, a school, or an entire system, teachers will be better able to assist their students when the need arises. Unfortunately, this need is more frequent than most people believe. It is strongly suggested that all school system personnel be included in the staff development.

PURPOSE

To help students think through and learn about issues surrounding death, dying, and grief in a supportive environment. when they are forced
to deal with these issues in a personal crisis. When a crisis occurs, a student often is able, with the help of his peers and school staff, to work through many feelings which are unresolved.

OBJECTIVES

1. Students will see death as a natural, expected, and manageable part of life. They will increasingly value life, their own and others’ whom they love and give thought to the use of time and living.

2. Students will pursue overall personality growth in the small group experience.

3. Students will increase self-awareness; exploring ideas, plans, and personal preferences of their own and significant others (hopefully group discussions will lead to family interaction in the home).

4. Students will understand the stages of grieving and expected behaviors. They will learn coping strategies for themselves and ways to care for others who grieve (Salter, 1982, pp 1-2).

{Be certain to include your special education teachers in your lesson plan materials that are shared during a crisis. Select with care the activities if you find yourself in the middle of a crisis without warning.}

GUIDELINES FOR HELPING STUDENTS DEAL WITH DEATH

Death is a very sensitive topic to discuss in the school setting. Teachers should be aware of the following strategies that can be used as needed. Numerous pitfalls should be avoided and various positive actions should be taken. It seems simplistic to list do’s and don’ts; however, such a list may be helpful in initiating death education. Because of space limitations, the list is limited to a few important suggestions.

1. LET STUDENTS EXPRESS THEIR FEELINGS AND OPINIONS.
It is important to let students know that expressing their feelings is normal and desirable. Too often we tell others to “Be brave” or “Don’t take it so hard” because we are uncomfortable seeing students upset. These feelings should not be repressed.

2. **USE SIMPLE AND DIRECT LANGUAGE IN EXPLAINING THINGS ABOUT DEATH.** A very complicated or detailed explanation may confuse children. Remember that students are at different developmental levels in terms of their ability to understand the concept of death. Help children to understand death by saying, “Mary has died. It is not like make-believe cartoons or cops and robbers. It is real. Mary is dead. But we still have our memories of her. Use a soft tone of voice.

3. **BEGIN WITH MATERIAL THAT AROUSES THE LEAST EMOTION AND PROGRESS TO SUBJECTS THAT AROUSE THE MOST EMOTION.** In this way students will be able to get used to talking about death and will be less likely to be overwhelmed.

4. **HELP STUDENTS KNOW THAT THEY ARE NOT RESPONSIBLE FOR THE DEATH OF A LOVED ONE.** Often children have magical thinking related to death and believe that wishing someone was dead or thinking bad thoughts about someone causes that person to die. Reassure students that this is not the case.

5. **PRESENT MATERIAL IN A NONMORALISTIC FASHION.** In relation to the topic of an afterlife, it is best for the teacher to present the idea that some people believe in an afterlife and some do not. Students can be asked to explore this topic with their parents, guardian or special friend. If they go to a church or a synagogue, they can explore the topic there.

6. **BE SENSITIVE TO STUDENTS WHO MAY HAVE EMOTIONAL OR NEGATIVE REACTIONS.** Although most students will have positive reactions, some may experience increased anxiety about death, nightmares, or insomnia. Occasionally students may be visibly upset in class. These reactions do not necessarily mean that the student should no longer participate. Sometimes allowing a child to be upset may be therapeutic. Of course, professional judgment in each individual case must be used.
7. **TELL STUDENTS THAT SICKNESS MAY BE THE CAUSE OF DEATH BUT EXPLAIN IN DETAIL.** It might be helpful to explain that only a very serious illness may cause death and that we all get sick sometimes but we almost always get better. Otherwise, students might be afraid of death when confronted with minor illnesses. Similarly, it is unwise to explain the cause of death as being old age. Statements such as, "Grandma died because she was old" will become confusing when students see that younger persons die as well. It might be better to explain to the students that most people live a long time and that you expect them to live a long time, too.

8. **TELL STUDENTS THE TRUTH.** Do not tell students things that are false, do not tell students that a dead person is sleeping or has gone on a long trip. These explanations can cause undue fear of sleeping or trips. Students will find out that these explanations are not true.

9. **TELL STUDENTS THAT YOU DO NOT HAVE ALL THE ANSWERS ABOUT DEATH.** Let them know that there are some things that are not understood about death (Brookshire and Noland, 1985, pp. 77-78).

**RESOURCES**

A good point to start is to make a list of books and resources available in the local schools, public libraries, and various community agencies. After much research and evaluation, the authors chose to focus the resources on printed material. It is easy in a time of crisis to share books and very comforting to have someone read to you. The authors believe that one of the staff activities for a school would be to select audio visual and reading materials that reflect the school and community population.

**THE FOLLOWING BOOKS DEAL WITH DEATH AND DYING:**

1. About Dying
2. The Accident (Pet)
3. Adolescent suicide
4. Anne Frank: The Diary of a Young Girl
5. Annie and the Old One
6. Badger’s Parting Gift
7. Blackberries in the Dark (Grandparent)
8. Bridge to Terabithia (Friend)
9. Charlotte’s Web (Friend)
10. Death and Dying: Closing the Circle (1/2” video)
11. Explaining Death to Children
12. Facing Death
13. The Fall of Freddie The Leaf
14. How It Feels When A Parent Dies
15. The Kids Book About Death and Dying
16. Letting Go With Love: The Grieving Process
17. Life Times
18. My Grandson Lew (Grandparent)
19. Nana Upstairs and Nana Downstairs (Grandparent)
20. Responding to Adolescent Suicide
21. A Summer to Die (Friend)
22. A Taste of Blackberries (Friend)
23. The Tenth Good Thing About Barney (Pet)
24. Tuck Everlasting
25. The Two of Them (Grandparent)
26. Where the Red Fern Grows

For more specific book information and additional titles contact:
Coastal GLRS, 912-927-5239

SUPPORT PERSONNEL
SHOULD BE AWARE OF THE
FOLLOWING STRATEGIES TO BE USED AS NEEDED

--Consider the child’s past experiences--death of a pet or the life cycle of plants--in your explanation.

--Look for cues of the child’s feelings. If they aren’t apparent, ask him/her directly, “How do you feel about this?”

--Make explanations in a calm, natural tone of voice.
Although it's healthy to show your own sorrow, if you are extremely upset, wait until you calm down so that the child is not frightened.

--Be honest and truthful. Never give a child an explanation you can't accept.

--Let the child have his feelings of anger, depression, whatever. Don't tell him/her not to "say those things" or "ask those questions."

--Make things appear no better and no worse than they are. Some examples of what you might say include: "He was old and his body wore out." "Some diseases are curable, others are not." "He had a disease we can't cure yet, so he died. Maybe we'll be able to cure other people who have the same disease." "We will not see him again, but we sure have wonderful memories to think about."

--Meet individual needs. A child may need a hug and a shoulder to cry on, or he might need to be alone for awhile.

--Allow the child to share in the grieving process and to attend the funeral if the mature child requests permission. Never force a child to do something he doesn't feel comfortable with. That might only make him feel guilty for not going.

--Listen to the child and hear what the child is telling you.

--The child maybe afraid of what happened to a member of the family, will also happen to him. The child may feel guilty. "That should've been me that died, not my daddy or my mommy."

--The child may be afraid to talk about the lost loved one.

--Have the child bring a picture of the person that has died. Look at the picture together. Talk about happy memories. This is a particularly healing activity. Recall as many happy memories as possible.

--Be sure to stress that there was no way the child could have prevented the death.
--Encourage the child to interact with family members. The child should be included in all family activities. The family love and closeness is comforting. Shielding a child from circumstances makes the child more fearful. Have the family to plan activities together and do things together in the days to come. Go to the movies, outings, shopping, etc. Plan activities with the child’s friends...Keep Busy!

--When the child is feeling angry about his loss, teach him/her to express negative feelings by hitting a pillow, crying, or whatever the child needs to do to relieve the stress and sorrow.

--And most of all, if the child is feeling fearful, “Talk. Only by sharing the child’s feelings of fear with someone can the child trust you and begin to deal with his feelings. Coping with death is not easy, but it can teach a great deal about yourself...you are not alone with your fears. Learning to cope with death means learning to live” (Brookshire, 1981, pp. 1-2).

SUMMARY

The primary aim of this project is to provide the teacher with a direction to create a secure atmosphere in which students can share their feelings, ideas, and beliefs with classmates and teachers. Students should be encouraged to express themselves freely and realize that there are few absolutely right or wrong answers. To provide a safe atmosphere, the teacher should offer warm support to all students and show a sincere interest in listening to the comments of students. Often this type of discussion will lead to choices between alternative courses of action that will result in guiding students to the kind of future decisions they will consider when dealing with death on a public or private matter of concern.
REFERENCES


COLLABORATIVE CONSULTATION IN A RURAL SCHOOL

Introduction
My introduction to special education began in 1980 with a rural school of one hundred students in grade K-9. I quickly discovered that the idealistic vision of schools portrayed in college education courses and the reality of a tiny school district had little in common with each other. There was no counselor, special education director, psychologist or speech teacher. I soon found, however, ways to acquire resources needed to service special education students. We hired an itinerant speech teacher who came weekly. We found a volunteer who had a degree in counseling and we organized a consortium with three other small district to serve our SED population and share a nurse. I found colleges who were willing to do free assessments and even provide some tutoring. Our local county educational service district also helped with migrant education, psychological assessments and information.

I moved on to a somewhat larger district with a school which had approximately 350 students in grades K-6. It was during the nine years I spent in this rural school that I really gained first-hand experience as an educator in special education. I was given the title of coordinator of special education but "jack of all trades" would have been more appropriate. This position gave me the opportunity to be responsible for all federal and state regulations (paperwork), to be involved in state inservice meetings, to access regional support programs, run the Chapter One program, and be in charge of other support personnel which included, a part time speech person, an intervention teacher, a contracted occupational therapist, a part time counselor another special education teacher and instructional assistants. It also gave me the opportunity to develop a special education program I was proud of that included consulting, team teaching, inclusion, classroom modifications, a prereferral team and a multi-disciplinary team.

Purpose of Presentation
The purpose of this presentation is to describe how two special education teacher and other school personnel implemented and maintained a collaborative consultation program (Glenn, 1994). In addition to its important descriptive contribution, this presentation will examine the implications this study has for better understanding collaborative consultation and its successful implementation and maintenance in other rural school settings. Due to the cooperative nature of
collaborative consultation, this presentation will be of interest to not only special educators but to practitioners, other specialists, regular educators and school administrators.

Brief Review of the Literature
The field of special education is full of controversy. There is little agreement over the meaning of terms such as inclusion, mainstreaming, regular education initiative, least restrictive environment and collaborative consultation. Since these terms are used to express writers points of view it is hard for people in the field to agree on what is happening and what should be happening in special education. There is also disagreement over the role of the special educator, the administrator and other staff members in providing adequate services to special education students (Evans, 1990; Jenkins & Leicester, 1992; McGrady, 1985; Pugach & Johnson, 1989).

Collaborative Consultation
Although the literature describing characteristics of consultants and consultant models is abundant, there is a lack of consensus about collaborative consulting. Some believe collaborative consultation should be used for prereferral interventions (Evans, 1990; Johnson & Pugach, 1991; Yocum, 1990). Others think co-teaching is the most important part of collaborative consulting (Friend & Cook, 1992b). Still others emphasize the importance of a team approach and making sure those involved accept responsibility for the decision making and implementation (Huefner, 1988; Pugach & Johnson, 1990).

An extensive review of the literature did not discover a comprehensive definition of collaborative consultation. I combined, therefore, aspects of collaborative consultation which were espoused by more than one author and the characteristics which were common to all consulting models. The components included: (1) voluntary participation, (2) problem solving, (3) working together for a common goal (West & Idol, 1987), (4) shared responsibility for the student (Friend & Cook, 1992a), (5) prereferral teams (Johnson & Pugach, 1991), (6) IEP's development include the classroom teacher (Idol, et al., 1986), (7) the special education teacher and classroom teacher do lesson planning and teaching together (Friend & Cook, 1992b; Self, Benning, Marston, & Magnusson, 1991), (8) specialists are in the classroom most of the time (Friend & Cook, 1992a & b), (9) regular meetings between the specialists and classroom teacher (Friend & Cook, 1992a & b), and (10) minimal pull-out (Friend & Cook, 1992a & b). By combining these ten descriptors, I developed a working definition used for this study.

The remainder of this paper will deal with my observations of approaches to collaborative consultation in two schools, one rural and the other urban, with an analysis of their similarities and differences.
K School
K School is located in a rural area in Oregon at the foot of Mt. Hood. K School is one of five schools in the district. Its initial enrollment of 220 students has climbed to nearly to 400. The school is located in an upper middle class area that includes commuters to Portland, farmers and nurserymen.

Program Description
K School's collaborative consultation is arranged in the following way. The year has been broken up into five week blocks. During four of those weeks, Jane, the special education teacher, goes into the classrooms four days a week. She spends Wednesdays and one week out of five in her office doing testing, writing IEPs, planning for the next theme she will be teaching and attempting to complete paperwork. Other specialists involved in working in the regular classroom are Joan, a speech/language teacher who spends time in the classrooms two days a week, Carol, a TAG teacher; and Penny, a district consultant. This team of specialists alternate the five week block between primary grades and upper grades.

Many people on the staff have been involved with collaborative consultation. These people include Don, the school principal; Linda, the instructional assistant; Carol, the TAG teacher; Joan, the speech/language teacher; Penny, the itinerant consultant; most classroom teachers; and Jane, the special education teacher. I was able to observe Jane in a variety of settings which included regular classrooms, staff meetings, consultation meetings, meetings with individual staff members and in personal interviews in her office and by phone.

Jane's teaching day is only a piece of collaborative consultation at K School. Another important piece is the collaborative consultation meeting which takes place on Wednesday of the fifth week. Roving substitutes are hired to cover for the classroom teachers and meetings are scheduled so that specialists can meet with each grade level twice during the day.

Other meetings included the entire staff discussing how inclusion is going and changes they would like to see. Shorter meetings in classrooms between different grade levels and individual teachers were also held. There were also quickly meetings over lunch, in the hall or at the back of the classrooms.

Collaborative consultation started at K School about five years ago (just in Carol's room) because Carol, the TAG teacher, didn't like her kids being pulled out. About two and a half years ago they started talking about doing it in the whole school. They had some inservice meetings and sent people to special education conferences. Last year she and Joan, the speech/language teacher set up centers in the library for each class to use. This year they just decided to dive in.

When Jane was asked what was needed in a good inclusion model, she offered with several ideas. She believes those involved need to go to conferences, observe other schools and continue to learn. As a specialist she felt rapport with teachers was very
important. Both the teachers and specialists had to be willing to give and take. She considered time for planning and scheduling as critical. She also mentioned that administrative support has helped and being able to work cooperatively with Joan, the speech/language teacher and Carol, the TAG teacher, has made an important contribution to the quality of the services. In addition, she thinks special education teachers need to be flexible, understanding, patient, creative, know how to make modifications, be willing to give extra time, and have good teaching skills.” One of her biggest concerns is that “IEP kids don’t fall through the cracks and that all kids have a chance to be successful.”

At the end of the school year the staff met to discuss collaborative consultation. Jane felt she received a lot of support and positive reinforcement about working in classrooms. Teachers had a better attitude towards special needs students and were willing to try this approach for another year with some moderate changes. One change was that Jane will be checking in once a week for about fifteen minutes into those classrooms where she is not working. Other concerns about math, speech and meeting IEP goals are still being resolved.

Collaborative consultation is only a year old at K School. The staff still feels there are things to work out. However, they have come up with some interesting solutions. It is obvious that at K School collaborative consultation is a team effort that has been supported by lots of enthusiasm from everyone.

S School
Another school I observed was S School which is located in low income area of a large city and is a part of a middle size school district. It is an older school that was built thirty years ago in a bungalow style. S School has been involved in collaborative consultation for three years. Those involved in making it work are the resource room teacher, the Chapter One teacher, their instructional assistants, the speech/language teacher, the principal and the classroom teachers. After reviewing the model and the information on collaborative consultation, the S staff listed their own strengths and concerns and prioritized what they felt they should work on first. They met about five times that spring and set up some guidelines. Judy, the special education teacher, said, “We designed it month by month.” At each meeting Judy brought in new information. For example, she presented Lorna Idol’s book and collaborative consultation model and shared the bibliography from the consulting teacher project (Idol, 1983). She encouraged the teachers to focus on reading and they came up with a way of combining the fourth, fifth and sixth grade reading classes and training the entire staff.

By fall they had a plan and a name, they called it SUCCESS (S Utilizes Collaboration of Colleagues in Educationally Successful Settings). They continued to meet regularly throughout the 1989-1990 school year to discuss how it was working and brought in guest speakers. The minutes of the September meeting showed they started slowly at first with only 3rd-4th reading groups, then 5th-6th reading. October’s meeting brought a review of SUCCESS, a speaker on prereferral teams, a
discussion on writing IEPs, special education forms and procedures, and use of instructional assistants. In November, a School Instructional Adaptation Team was formed to help teachers design academic and behavioral adaptations that provided students opportunities to succeed. At the December meeting they discussed attending an inservice meeting in February and requests received from other schools to observe their program. They also spent a great deal of time discussing goals at Sacramento, things that were helping and hindering, and strengths and weaknesses. In April they talked about next year, Chapter One money and pressure from the district to end homogeneous grouping for reading.

The final meeting of the year in May was used to go over the survey the staff had completed. Staff had reported positively on improvement in student self esteem, and support from the resource room. There were mixed results when they were asked about meeting IEP needs, but all agreed they better understood their responsibilities since they had to help write IEPs. The prereferral team received mixed reviews as some teachers had not used it and others were not sure it had helped. The question about planning time received the most comments and negative responses. People felt like they needed more planning time, they needed to meet more often, release time would be helpful and some coverage when they had meetings to attend would be greatly appreciated. Chapter One concerns, elimination of retentions by the district, and setting up a meeting with the district administrators to share their model were also discussed.

After the first year they didn’t meet very often as they felt like they had already worked out many of the problems. At the end of the second year, the SUCCESS team prepared an extensive year end report which identified twelve strengths of the program. These strengths included: meeting the needs of new students, the CARE team (prereferral team), the MDT Team (multi-disciplinary team), Reading, Chapter One, the language/reading program being used for students with learning difficulties, math, IEPs written as a team, report cards, curriculum and behavioral collaboration and the belief that “gray area” kids were having their needs met. They still had concerns, however, with curriculum adaptation and planning time. They started the 1991-1992 school year with a Building Improvement Plan and a building site committee which incorporated many of the goals of SUCCESS. The building improvement plan focused on the following special education issues; planning, curriculum adaptation, use of instructional assistants, 5-7 early release days for planning, meeting individual needs, self esteem, and continuing the SUCCESS plan.

When I interviewed Judy in the spring of 1992, she expressed concerns about staff cuts due to budget problems. She lamented, “We are not where we thought we would be in three years. A piece of it is planning time. Regular teachers are not buying into it. We haven’t even met this year, we will have to take time later this spring to look at where we are going.”
S School appears to be at a different stage in their development of collaborative consultation. Their program appears to be going through less change, the staff seems more settled with the concept and also more sure of themselves. Both schools seem very committed to students and appear to be doing an excellent job of meeting special needs with limited resources. However, concerns about budget cuts definitely affected Judy and the rest of the staff’s enthusiasm at S School.

Common Themes
An analysis of the data gathered from visits and interviews, coupled with my own professional experiences with collaborative consultation, suggest five common themes about collaborative consultation.

1. Making the change to a collaborative consultation approach and then maintaining it requires close teamwork. At both schools, the special education teachers were part of a team that implemented the change to collaborative consultation. Notes from these meetings indicate a wide variety of staff was involved which included the principal, the speech/language teacher, PE specialist, special education teachers, an instructional assistant and several classroom teachers.

At K school the initial approach to collaborative consultation was different from S school. Each school set up their initial planning teams differently, but they both spent time increasing knowledge at the preplanning stage. Implementation meetings were held between specialists and the principal. The K School planning team gave staff time to process change by spending an entire year talking about inclusion, increasing knowledge about collaborative consultation and then at the end of that year, modeling the use of centers developed by the special education teacher and speech/language teacher. The main focus on teamwork at K School came during the maintenance of consultation.

An advantage both schools had was that the principal was part of the team. The active support of school administrators for the change to collaborative consultation greatly increased its chance of succeeding even though the way in which the two principals showed support for the change varied (Fullan, 1991). Don, the principal of K School, actively observed other schools, attended workshops, participated in presentations, and gave teachers release time to attend workshops and visit other schools. Linda, the principal K School, quietly supported Judy, the special education teacher. She attended all planning meetings, allowed for release time and encouraged Judy to share information. Utilizing a team comprised of all the stakeholders to implement and maintain a collaborative consultation approach increases the likelihood it will be successful.

2. Planning is the single most important ingredient in making collaborative consultation work. Planning must accompany all phases of collaborative consultation such as the implementation, maintenance and evaluation phases. Both schools started planning long before collaborative consultation began. At the beginning teams at both schools met to brainstorm and develop a plan for
implementation. S School did it at potlucks, while K School worked as a team of specialists with the principal. During maintenance of collaborative consultation, meetings were held to evaluate the program and plan for the next stage. K School met to develop thematic units, write lesson plans and develop schedules while the S School SUCCESS team met during the first year to evaluate progress and share information. Both schools held end of the year evaluation meetings where improvements for next year were developed. Other kinds of planning at both schools involved IEP meetings with parents, multi-disciplinary team meetings, scheduling meetings, parent conferences, ongoing inservice meetings and the usual daily lesson planning.

3. The special education teachers observed had more responsibility than classroom teachers and displayed specific actions and skills that helped in consulting. One of the most time consuming responsibilities is evaluation. Jane expressed a great deal of frustration about never getting caught up with testing even though both special education teachers had extra preparation time.

Certain qualities were common to these two special education teachers. They appeared calm, relaxed, positive with others and soft spoken, in spite of always feeling behind. Both were good communicators who spent a lot of time talking informally with teachers and guiding discussions during planning meetings. They both did a good job of communicating expectations to students. In addition, they provided leadership for the collaborative consultation approach.

One of the greatest strengths both teachers had was their organizational skills. Both were involved in a wide variety of activities each day which they managed quite well. Going from classroom to classroom and doing something different in each one requires a great deal of flexibility, organization and preparation.

Jane and Judy also showed a lot of flexibility in working with teachers as they willingly did something different for each grade level or teacher. Jane was teaching research in three classes as well as doing centers for two others. She had just completed making pop-up books with two primary classes and had studied oceanography with another. They were always positive with both the staff and students and I never heard either one make any negative comment about staff or administration.

Lest you think these two are clones, please be assured that they were not exactly alike. Judy was far more outgoing than Jane. But both teachers displayed many of the characteristics mentioned in the literature that were beneficial to special education teachers (Ramsey et al., 1991). They had a basic knowledge of special education and its history. They were able to identify handicapping conditions and do the assessments necessary to identify those that were eligible and write Individualized Education Plans. Each teacher possessed a variety of teaching strategies and knowledge of instructional content.
4. There is more than one way to do collaborative consultation and schools can adapt their programs to fit the needs of their students and teachers. Neither school had fully implemented the ten descriptors used to define collaborative consultation although K School had implemented all ten to some degree. Of the ten descriptors, K School had fully implemented six: shared responsibility for students, two or more coequal parties working together, lesson planning together, regular meetings, specialist working in the classroom and minimal pullout.

Collaborative consultation at S School was completely different from K School. Although S School had also implemented to some extent, all of the ten collaborative consultation descriptors in the definition, school personnel at S School didn’t exactly team teach but combined their skills during reading time and grouped several classes. At the beginning of collaborative consultation, they were meeting on a regular basis to discuss students and teaching, but due to budget cuts they were no longer hiring a substitute for planning time. S School did more pullout and spent less time in the regular classroom than K School. The extent to which they were involved in all aspects of collaborative consultation is open to some interpretation.

5. Several factors such as administrator support, a team approach and preplanning influence the outcome of collaborative consultation, but these two specialists agree sufficient time is the biggest issue affecting success. It is clear from interviewing staff and reviewing meeting notes that collaborative consultation is not the perfect solution to meet the needs of special students. Time is the one major concern that came up again and again as people work on planning, and special student needs. Most teachers feel their days are full and unless there is some release time, collaborative consultation places additional demands on their time. Teachers surveyed complained about not having enough time to plan and to collect and organize information. They also complained about not having enough time given by instructional assistants and the speech/language specialist.

Conclusions
This research on collaborative consultation suggests five conclusions. (1) It is important that the special educator does not attempt to implement collaborative consultation without extensive support and commitment (Griffin, 1988; Little, 1990). (2) Adequate planning, individually and with peers on a continual basis, is the single most important ingredient for successful collaborative consultation. (3) Special educators need to know themselves well enough to decide if they are the type of person who will enjoy being part of a team, can be well organized, confident, flexible, positive, good communicators, and exercise sufficient leadership. (4) There are a variety of ways to develop collaborative consultation increases its potential for success by making it possible to adopt and adapt it to the preferences and needs of teachers and students at each school. (5) Allotting sufficient time for members of the team to plan, develop, and implement a quality collaborative consultation approach is the one factor that affects all other aspects of a successful program.


INCLUSIVE EDUCATION IN BILLINGS, MONTANA: A PROTOTYPE FOR RURAL SCHOOLS

Abstract

During the 1992/93 school year, Billings School District #2 implemented full inclusion of students with disabilities at Garfield Elementary. The district had been studying the feasibility of inclusive education for two years previously and designated Garfield as a pilot site for inclusion. At the close of the 1993/94 year, the district evaluated its fledgling inclusion efforts. The Billings experience can be shared with rural educators as a guide for designing quality inclusive education in rural areas. Billings inclusion efforts are applicable to rural administrators seeking guidelines for inclusion of students with disabilities in regular education classrooms and to both regular and special teachers seeking strategies for collaboration and instruction. The emphasis here is on the process followed for implementing inclusive educational practice, rather than on the continuing debate over the viability of Inclusion.

Introduction

Inclusive educational practice is sweeping our country. Inclusion is not synonymous with REI, but is an outgrowth of the Regular Education Initiative. In 1986, Madeline Will questioned the efficiency, and efficacy of the dual special/regular education framework in which we had been working since the 1975 passage of Public Law 94-142. She suggested a unified system which would include all students with mild disabilities in regular educational programs as an alternative. Such a system could improve the education of all students by joining the efforts of special and regular personnel in provision of programs. Inclusion grew from Will's original proposal. Parents, educators, and theorists began to question limiting unification to the education of students with mild disabilities. Seeing both academic and social growth of both regular and special students in inclusive settings, they asked, "Why not include students with severe disabilities as well?" The die was cast.

History of Inclusion in Billings District #2

Billings and Yellowstone County are Montana's most populated area. Together, they represent approximately 14 percent (113,419) of the state's total population. Billings provides a network of resources, including air, rail, and bus transportation, two medical centers, two colleges and a vocational/technical center, as well as energy and agriculturally related industry, which make it the hub of eastern Montana.
The smaller communities within the state look to the Billings Public School District to provide proactive educational leadership. The district provides excellent educational opportunities as supported by scores on yearly achievement tests given throughout the schools. The district is composed of 24 elementary schools, four middle schools, three high schools, one career, and one administration center which houses an adult education program.

Current school enrollment is 17,869 students. Special educational services are provided to 2,058 children or 12 percent of Montana's children with disabilities aged 3 through 21 years. Of the state's infants and toddlers with disabilities, 12 percent are served by the Billings District through a contract with the Department of Developmental Disabilities.

The Billings schools continue to provide a full continuum of special educational options, but have developed an inclusive education thrust over the past three years. Recognizing their own dual system and in response to Will's (1986) proposal to unify regular and special education, the district formed an REI Committee. The group of twenty-two members included district administrators, teachers, board members, parents, community representatives, and Eastern Montana College faculty. During the 1990/91 and 1991/92 school years, the committee met on a regular basis to study the feasibility of including students with disabilities in regular education as the rule rather than the exception.

Initially, information sessions were needed so that everyone had at least a basic understanding of the problem and of educational terminology. Subcommittees were formed according to educational level of interest--preschool, elementary school, middle school, and high school. Each committee researched the following areas: (a) attitudes and awareness; (b) needs of students; (c) needs of teachers; (d) implementation issues; and (e) impact on regular education. The subcommittees carried out their charge through surveys, interviews, review of materials, and small group discussions. Representatives of the committee as a whole visited pilot schools in the state of Washington, and the committee chairperson visited schools in Endicott, New York, and Coudersport, Pennsylvania. In the spring of 1992, a proposal for inclusive education was presented to the school board.

Although initially reluctant with regard to Inclusion, the committee fully supported the practice in its final report. The following recommendations were made to the board:

1. Increase the opportunity for full inclusion of students with disabilities in regular classrooms, as teachers, parents, and staff are trained and as resources are developed. The central focus for placement should be the individual needs of students.

2. Develop a pilot program for full inclusion at one elementary school for all students with disabilities living within that school's attendance area.
3. Develop and implement a program to prepare students from kindergarten to 12th grade to accept other students who have differences in appearance, learning style, and capability.

4. Support regular classroom teachers who serve students with disabilities by giving them extra time to plan, inservice opportunities, resources and materials as needed, reduced class loads, paraprofessional assistance, and district incentives for completion of additional training.

5. Ensure integrity of regular classroom instruction through provision of sufficient support.

6. Expand inservice opportunities to administrators, support staff, and various classified staff.

7. Evaluate outcome of inclusion efforts.

The Pilot Year

Garfield Elementary School was chosen as the pilot inclusion site. Garfield maintains a population of over 400 students, approximately 50 of whom qualify for special education services. The majority of children come from a lower socioeconomic background and represent varied ethnicity. Beginning in the 1992/93 school year, all students were placed in regular classrooms. Special education teachers, previously providing pull-out services began collaborating with regular educators in the regular settings. As a Professional Development School, Garfield receives additional assistance from Eastern Montana College in the form of faculty participation and as a site for preservice student field experiences.

Other interested elementary and secondary schools within the district implemented Inclusion on a more limited basis. Sandstone Elementary placed all of its special education students in one class per grade level. Although not the inclusive ideal, Sandstone did not have the special education resources to distribute students with disabilities proportionately. Eagle Cliffs Elementary included some students with severe disabilities in regular classes. Numbers of students with severe disabilities are disproportionately high at Eagle Cliffs. Because Eagle Cliffs is accessible, students are bussed there from across the district. Some of the teachers at this school have been understandably wary of inclusion. The middle schools throughout the district are moving to a center based model in which teachers are on teams, have a team planning time, and provide for students, whether labeled as special education or not, in a center on an as needed basis. During the second semester of the 1992/93 school year, one of the district high schools included fifteen 9th grade special education students in regular academic core classes. Regular and special education staff at the school volunteered to participate in the project, had additional planning time, and made various adjustments for the included students. Pockets of inclusive practice can be found in the two high schools and elementary schools other than those discussed.

Evaluation Efforts and Results
In response to a school board request and in compliance with the original committee proposal, the special education department conducted an extensive evaluation of the district's inclusion efforts at the end of the 1992/93 school year. Achievement test data demonstrated consistent academic gains made by regular education students. Detailed review of special education students' progress toward IEP goals and objectives demonstrated achievement of annual goals in all but one or two cases and phenomenal two to three year gains in others. Teacher reports attested to social development by both regular and special students in inclusive settings. Teachers at the high school level lauded the team approach, recommended reduced class sizes, and cautioned that three regular classes per semester may be too demanding for some students with disabilities. District teacher attitudes tended to be neutral or slightly negative toward Inclusion overall. However the teachers actually involved in Inclusion were positive, sometimes glowing in their reports. Teachers, whether involved in inclusion or not, whether special education, or not, responded positively to the need for training.

As a result of the evaluation, the school board decided to continue Inclusion within Billings schools. The practice will be implemented in current sites and will be expanded slowly as teachers receive more information and training, and as resources to support the practice are accrued. The district developed an inclusion planning guide for schools as they initiate more inclusive practice. In addition, Billings has developed a menu of inservice training needs, and has received a state grant to begin staff development during the present school year.

Inclusion awareness, having been identified as a critical need of both teachers and administrators, is a current inservice goal. The following activities support goal accomplishment: (a) continued publication of the Inclusion newsletter *Speaking of Inclusion*; (b) distribution to each school of an Inclusion "starter kit" with basic information and examples of best inclusive practice; (c) provision of ongoing training to include general information, philosophy, legal bases, issues, and problem solving for administrators and teachers.

**Current Inclusion Committee Activity**

The REI Committee, renamed the Inclusion Committee, continues to function, but with new members. In order to maintain a balanced perspective, the committee membership will not remain static, but will change as new board members take the place of old and as additional stakeholders are identified. The district feels strongly that both Inclusion advocates and opponents be represented. The committee meets on a regular basis, and works following the ground rule of not rethinking previous committee decisions. The momentum is thus to move forward, rather than becoming mired in the past.

The Inclusion Committee's role is to set the direction for inclusive educational practice in the Billings schools and to identify areas needing support. The group has recommended the following strategies: (a) provide information for district parents to include a home-school inclusion newsletter, and a televised
Inclusion panel; and (b) gather information on self-contained students' needs in the event that the district moves to a total Inclusion model.

Application to Rural Schools

Billings is by Montana standards a large urban community; by most standards, this small city represents middle America. Garfield Elementary, situated in a low socioeconomic area and populated with children of varied ethnicity represents a microcosm of rural Montana with her depressed economy, seven Indian reservations and growing Hispanic population. The organized sequence of activities which the Billings school district employed to introduce inclusive education is not limited to the community, but is applicable to rural cooperatives and districts interested in introducing inclusive practice in an orderly fashion to their schools.

In many rural areas, students are "included" in regular education because there is a lack of special services. Other rural schools may continue with pull-out programs because personnel lack the information and training to do otherwise. The Billings experience can help rural schools by providing a structure for inclusive education, by sharing information about inclusive educational practice essential for schools in remote areas, and by advising rural districts and cooperatives how to avoid mistakes made in the change process.

References


General findings cited by Biller (1987) show education to be the primary determinant of occupational status. Biller notes that success in school shapes an individual’s aspirations and subsequent attendance in college.

Until recent years, there has been a general lack of college programs available toward which students with learning disabilities (LD) could set their goals. Students with LD have traditionally selected to transition into vocational options not requiring college training (e.g., mechanic, cosmetology, electronics, plumbing) (Shaw, Norlander & McGuire, 1987). Several factors have contributed to students with LD not pursuing college as a postsecondary option. These factors include: perceptions of students and their families that college was nonessential; concerns of students their families and teachers that students would not be successful in college and lack of awareness of how to access services available to students in postsecondary institutions.

Students with LD are now enrolling more frequently in higher education programs (Dowdy, Carter & Smith). Hartman, Kruilwich and Hippolitus (cited in Mangrum & Strichart, 1988) have attributed the increased participation of students with learning disabilities in postsecondary education to four factors. First, there has been an improvement in the identification and assessment process. Second, appropriate provisions have been made for students with LD in elementary and secondary schools; therefore, they are better prepared for college. The third factor suggests that those students with LD, who had been provided an education resulting from provisions of PL 94-142, are now of college age. Finally, there is an increase in the awareness among postsecondary institutions that students with LD can succeed in college given the necessary support.

Despite these increases, many students with LD often do not consider college as an option. Those that do enter postsecondary education programs frequently encounter personnel lacking knowledge about accommodating disabilities (Putnam, 1984). This paper will review
the needs of college students with LD, the skills needed by high school students preparing to enter college, the roles various school staff members can play in preparing students with LD to meet the demands of college, resources useful in preparing students for transition, and transition of students from secondary to postsecondary programs in rural areas.

**Needs of College Students with LD**

A review of current literature on preparing students with LD for college indicates a number of skills needed for success. These skills may be grouped into four main areas: academic, social, emotional/self-esteem, and self-help/survival (Hildreth, Dixon, Heflin, Frerichs, in press). Miller, Snider and Rzonca (1990) investigated variables related to successful participation in postsecondary education for students with LD. They found factors that significantly related were cognitive abilities, reading achievement levels (e.g., academic areas), participation in extracurricular activities (e.g., emotional/self-esteem and social areas), and utilization of vocational rehabilitation personnel (e.g., self-help/survival areas).

Academic skills consist of basics in reading, writing and mathematics in addition to being able to process information in an effective manner. Social skills center around a student’s ability to interact with others; this includes teachers and authority figures as well as peers. Emotional and self-esteem skills focus on evaluating one’s strengths and weaknesses. Students need to be able to effectively understand themselves in order to set appropriate and realistic goals. Self-help and survival skills are also needed to ensure success in academic settings. Students with LD need to be able to attend class regularly and on time. They should also be able to complete assignments without high levels of stress, turn completed assignments in on time, budget their time effectively, and advocate for themselves as individuals with disabilities.

The general assumption has been that college students with LD are very much like their school-aged counterparts. However, research has supported that the student with LD does change in character as he or she matures and that the change in environment creates a different set of needs (Ryan & Heikkila, 1988). Both secondary and postsecondary staff who want to support student with LD should avoid the stereotypes generalized from research on children with LD, while still recognizing that some problems such as information processing may continue (Aksamit, Morris & Leuenberger, 1987).

While some changes occur with maturity, academic problems that continue to hamper the college student with LD include severe underachievement, problems with automaticity, poor comprehension, perceptual confusion, and short attention span. Processing skills, study skills, difficulty with organization of time and use of reference materials persist as areas of difficulty. Additionally, students with LD were noted to exhibit poor self-concept, social immaturity, and inadequacy in social situations (Putnam, 1984). These findings support the need for continued special services at the postsecondary level to aid students with LD. More comprehensive planning and preparation at the secondary level will contribute to success in college.
Role of School Staff in Skill Development

Various researchers have addressed preparing students with LD to leave high school and enter postsecondary settings. Biller (1985) investigated the understanding of career development of adolescents with LD. He found that career readiness skills were not well developed. In general, they were not ready to cope with career decision-making tasks that would allow them to assess appropriate careers for themselves. Traditional vocational test batteries are not always applicable for students with LD. Biller recommends training to address these areas beginning at the high school level. Counselors, teachers, and other staff members can ensure that the skills needed for success in college are incorporated in the secondary educational setting. Parents can further these skills by encouraging generalization into the home environment.

An appropriate starting point for successful transition planning is an honest assessment by the students, their parents, and teachers in regard to the four areas described above (academic, social, emotional/self-esteem, and self-help/survival). Some students and parents may need to have these skills explained and identified in order to begin the assessment process.

If student and their parents view college as a goal, they may need additional information on the demands of college. Frank discussions of college and how it is different from high school is necessary in order to help students have a more realistic view of expectations. Parents and students may need assistance in comparing the student’s expectations with the students’ skill proficiency and the demands of a college setting. Goals clarification discussions such as these help to lay a solid foundation that will allow for a smoother transition from high school to college.

Students with LD who plan to go to college should enroll in as many regular education classes as possible. They should strive to achieve the same objectives that are set for all students planning to attend college. Modifications to content should be made only when necessary. To facilitate this, it is important for special educators and counselors to foster and maintain a good relationship with general educators who have a history of working well with students with special needs.

Students with LD should be strongly encouraged to gradually internalize coping skills frequently taught and used through secondary special education programs. Independence and organization can be fostered by teaching students to use day planners, assignment folders or notebooks and/or long term assignment tables. Counselors may find regular group sessions covering such topics as how to appropriately interact with authority figures, dating skills, and friendship skills of benefit to high school students. Various other educational strategies may be incorporated as well, dependent upon the original assessment of the students’ strengths and weaknesses.

As students approach their junior and senior years, additional issues need to be addressed. Counselors should provide assistance to students with LD as they investigate programs at local colleges and universities. Students and their parents need to be aware of differences in entrance requirements and programs for students with LD at various colleges in
order to make appropriate selections. Additionally, these final secondary years need to include training in self-advocacy. Students who are unable to assess their own needs and verbalize them will not be effective in accessing programs that may meet those needs. Further, they may need to be made aware of their rights as individuals with disabilities in order to effectively use the system designed to help them.

**Resource Information**

There are many resources on postsecondary options for students with learning disabilities available to professionals. One helpful aid teachers and counselors might use is *Tools for Transition* (Aune & Ness, 1991), a curriculum designed to assist professionals in preparing students with learning disabilities for transition into postsecondary settings. The curriculum includes identifying strengths and weaknesses, identifying learning styles, using study strategies, self-advocacy, and choosing postsecondary options.

The Educational Planning Strategy (I-Plan) (Van Reusen, Bos, Schumaker & Deshler, 1987; Van Reusen & Bos, 1990) has proven useful in helping many students with learning problems achieve self-advocacy skills. The goal of the strategy is to provide students with the skills to participate in decision-making conferences concerning them. The educational planning strategy can be taught by counselors, special education teachers, regular classroom teachers, and other professionals who are involved in the education of adolescents with special needs.

Professional and support organizations, such as the Learning Disabilities Association (LDA) and the Association of Learning Disabled Adults (ALDA), can provide information on a variety of topics concerning learning disabilities and transition. They also provide support to individuals with learning disabilities and their families.

The HEATH Resource Center operates a national clearinghouse on postsecondary education for individuals with disabilities. It can provide useful information on educational support services, policies, procedures, adaptations, and opportunities in postsecondary settings (i.e., colleges, vocational-technical schools, and independent living centers).

Books such as *College Students with Learning Disabilities* (Mangrum & Strichart, 1988), *Unlocking Potential: College and Other Choices for Learning Disabled People* (Scheiber & Talpers, 1987), and *Peterson's Guide to Colleges with Programs for Learning Disabled Students* (Mangrum & Strichart, 1985) may also be helpful resources. In addition, some states have published resources on postsecondary options for students with learning disabilities within their state.

**Transition in Rural Settings**

The transition needs of students with learning disabilities in rural settings probably do not differ significantly from the needs of students in urban and suburban settings. Students will need to develop skills that include those in the academic areas, social areas, emotional/self-esteem areas, and self-help/survival skills areas.
School staff in rural schools, however may have different advantages and disadvantages in programmatic provisions for secondary students with LD. Often smaller rural communities, where teachers and families live near one another, allow school staff access to knowledge of family characteristics and resources. As has been noted, accurate assessment of student and parent expectations is necessary in order to plan appropriate and realistic goals for the students. Proximity may allow school staff a more holistic view of their students. There may be informal opportunities in social settings outside of the school system that allow teachers and counselors to assist and influence their students’ generalization of skills to the home environment. Teachers in small districts often teach multiple subjects or perform in more than one role. This flexibility may heighten the awareness of general educators of the need to make accommodation for students with learning disabilities.

Disadvantages exist in some areas of rural transition opportunities as well. First, there may not be an awareness of the opportunities available to students with LD at the postsecondary level. Second, there may be fewer opportunities for students to become aware of the wide variety of professional or business options available to them. There may also be less variety in course selection at the secondary level making it more difficult to provide a match between the needs of individual student and the general education curriculum. Similarly, there may be fewer teachers in the school system, thereby, limiting the opportunity to choose and foster general educators who have interests and abilities in working with special needs populations. Programs and materials such as the Transition Implementation Guide (Boyer & Arden, 1992) and the Rural-Based Transition Model for Students with Learning Disabilities (Rojewski, 1989) may assist rural schools in building a comprehensive transition program.

Summary

Special and general educators, counselors and parents can play a major role in preparing the student with LD for a successful college career. Students must first be encouraged to assess their academic, social, emotional/self-esteem, and self-help/survival skills. Their strengths and weaknesses in these skill areas should be matched with their goals. An appropriate educational and transition plan can then be formulated.
References


Training School and Rehabilitation Counselors to Provide Cooperative Transition Services

The many transitions undertaken by students with disabilities include one which is perhaps the most difficult—the transition from school to successful community living. There are many variables which make this transition processes difficult, ranging from difficulty in making friends (c.f. Shafer, Rice, Metzler & Haring, 1989) to difficulty in finding employment (c.f. Hasazi, Gordon & Roe, 1985). Perhaps a major difficulty is the transitioning students' lack of contact with agencies such as State Vocational Rehabilitation. As many as one half of all transitioning students are not availing themselves of agencies organized to meet their needs (c.f. Roessler, Brolin & Johnson, 1990). This aspect of the transition process has received increasing attention since IDEA (PL 101-476, 1990) mandated that transition plans be added in IEPs and included vocational rehabilitation counseling as a related service for students with disabilities.

In order for students with disabilities to increase their possibilities of contacting appropriate adult service providers they need to have better linkages. Parents, advocates and school personnel can work together to begin to provide these linkages. Which school personnel are best suited for this task has been a concern. Several States have authorized positions such as transition coordinators, but who should fill these positions and how they would be funded remains unsettled (c.f., Gajar, Goodman, & McAfee, 1993). Expanding the roles of extant school personnel such as guidance counselors may begin to improve the transition process for students with disabilities.

School guidance and vocational rehabilitation counselors are peers who should be able to cooperate in the transition process as they both receive training in skills such as student social adjustment problems and post-school decision-making needs. But, rehabilitation counselors often have not been trained to understand (special) education problems and school guidance counselors often have not been trained to work with individuals with disabilities on their transition needs. Several States do not require general educators or guidance counselors to develop competencies associated with students with disabilities. To address these situations in one State in Appalachia two university departments, with input from public schools and adult service agency representatives, designed an innovative collaborative program. The overall goal of the program was to better prepare preservice and inservice counselors to work with the transition process in areas which are largely rural. The program was funded as a training grant by OSERS.

Background and state of existing services

Prior to initiating the program, several interviews were undertaken with vocational rehabilitation and school guidance counselors and a survey of all full time school liaison (vocational rehabilitation) counselors was conducted. Interviewees revealed, among other information, that there had been a school liaison counselor program existing between vocational rehabilitation and the school districts in the State since 1970. Currently all 55 school districts are served by a school liaison counselor (SLC) on at least a part time basis. Difficulties in providing effective service reported by interviewees and survey respondents
included: large case loads (SLC average 147, school counselors average over 250); "ruralness" (e.g., amount of territory covered by SLCs, distances between services and students, and lack of employment opportunities for students); lack of training (e.g., majority of SLCs indicated need for more training in special education, and need for internships in schools—none had done a school internship). Full time SLCs reported serving the following percentages of students (Table 1 Percentages of Students Served by Disability).

<table>
<thead>
<tr>
<th></th>
<th>United States</th>
<th>State-wide (SW)</th>
<th>SLC</th>
<th>Difference Between SW% and SLC%</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD</td>
<td>48</td>
<td>46</td>
<td>32</td>
<td>- 14</td>
</tr>
<tr>
<td>MR</td>
<td>13</td>
<td>19</td>
<td>33.2</td>
<td>+ 14.2</td>
</tr>
<tr>
<td>ED</td>
<td>09</td>
<td>06</td>
<td>06.5</td>
<td>+ 0.5</td>
</tr>
<tr>
<td>Physical/Visual</td>
<td>02.3</td>
<td>01.4</td>
<td>02.4</td>
<td>+ 02.4</td>
</tr>
</tbody>
</table>

The difference between the percentage of students served in State-wide public school programs and those served by SLCs can partly be explained by the major difference in vocational rehabilitation services and public school services. The latter is an entitlement while the former has eligibility requirements.

**Program Design and Competencies**

The program was designed to offer preservice (masters level) rehabilitation and school counseling students nine semester hours of training in: a special education elective, transition competencies, and a one semester externship. Training during the first year included 14 transition competencies (See Table 2 Competency #1-#11) offered in a summer session course. Each session of the four week course included a speaker involved with some aspect of transition—speakers ranged from parents and consumers to counselors and supported employment providers. All sessions and the overall course were evaluated by participating students, speakers were also asked to give feedback. Student evaluations revealed that there were probably too many speakers. They indicated that although all speakers were very knowledgeable, given the number of competencies to be covered, they tended to not be as interested in the speakers as they might be in another setting. During the second year, as a result of feedback from students and program advisory committee members, additional competencies were added and participating students voted on the competencies they thought most important (See Table 2 Transition Competencies). Other aspects of program evaluation were completed following the first year of the student externship (See Practicum below) and the revised program was extended to inservice rehabilitation and school counselors throughout the State in off-campus classes.
Table 2
Transition Competencies

<table>
<thead>
<tr>
<th>Competency #1</th>
<th>Career Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competency #2</td>
<td>Transition programs</td>
</tr>
<tr>
<td>Competency #3</td>
<td>Community survey techniques, incl. job locating</td>
</tr>
<tr>
<td>Competency #4</td>
<td>Occupational references and data bases</td>
</tr>
<tr>
<td>Competency #5</td>
<td>Transition curriculum</td>
</tr>
<tr>
<td>Competency #6</td>
<td>Job analysis</td>
</tr>
<tr>
<td>Competency #7</td>
<td>Job matching</td>
</tr>
<tr>
<td>Competency #8</td>
<td>Vocational evaluation</td>
</tr>
<tr>
<td>Competency #9</td>
<td>Job accommodations</td>
</tr>
<tr>
<td>Competency #10</td>
<td>Parent involvement, training</td>
</tr>
<tr>
<td>Competency #11</td>
<td>Career guidance tools</td>
</tr>
<tr>
<td>Competency #12</td>
<td>(Student) Personal/social skills - knowledge of</td>
</tr>
<tr>
<td>Competency #13</td>
<td>Team building skills</td>
</tr>
<tr>
<td>Competency #14</td>
<td>Transition program evaluation &amp; planning</td>
</tr>
<tr>
<td>Competency #15</td>
<td>Legislation &amp; litigation concerning transition (e.g., Social Security)</td>
</tr>
<tr>
<td>Competency #16</td>
<td>Interagency cooperation</td>
</tr>
<tr>
<td>Competency #17</td>
<td>Specific disabilities' transition problems</td>
</tr>
<tr>
<td>Competency #18</td>
<td>Case management</td>
</tr>
<tr>
<td>Competency #19</td>
<td>Transition destinations (e.g., from day prgms. to post secondary training)</td>
</tr>
<tr>
<td>Competency #20</td>
<td>Supported employment</td>
</tr>
<tr>
<td>Competency #21</td>
<td>Supported living</td>
</tr>
<tr>
<td>Competency #22</td>
<td>Future planning (incl. individualized prgms.- e.g., IEP, ITP, IWRP)</td>
</tr>
<tr>
<td>Competency #23</td>
<td>Community and adult service agencies (e.g. types and services)</td>
</tr>
<tr>
<td>Competency #24</td>
<td>(Student) Resume writing and job interview techniques</td>
</tr>
<tr>
<td>Competency #25</td>
<td>Advocacy, incl. self advocacy</td>
</tr>
<tr>
<td>Competency #26</td>
<td>Leisure/recreation skills development</td>
</tr>
<tr>
<td>Competency #27</td>
<td>Support networks</td>
</tr>
<tr>
<td>Competency #28</td>
<td>Other (please identify)</td>
</tr>
</tbody>
</table>

Externship/Practicum

The externship was designed as a supervised three credit, semester long transition practicum (See Table 3 Practicum Credits, Hours & Outline of Activities). Preservice students in school guidance completed transition practicum requirements in concert with their part-time counseling practicum, while rehabilitation counseling students completed the transition practicum requirements as part of their full-time internship. Regardless of their location, each student was required to contact their cooperating supervisor's counterpart in school or rehabilitation counseling for interviews and to arrange program visits (See ACTIVITIES).

Table 3
Practicum Credits, Hours & Outline of Activities

The Transition practicum was designed for 3 credit hours in special education. Activities required the practicum student to devote approximately one full day per week to the transition program (approx. 96 hrs total). In addition to the Practicum Meetings for School Counseling students (6 hrs), two full days (16 hrs) were spent by all practicum participants at the
Rehabilitation Counseling Students seminar.

Following is an outline of the activities and products completed during the semester.

**ACTIVITIES**

<table>
<thead>
<tr>
<th>School</th>
<th>Guidance</th>
<th>Practicum</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 days</td>
<td>Interview Voc.</td>
<td>Rehab. counterpart</td>
<td>(Transition Practicum meetings of 11/2 hrs. each to be held Weeks: 3, 6, 8 &amp; 13)</td>
</tr>
<tr>
<td>3 days</td>
<td>Visit post sec. prgms</td>
<td>Interview Guidance Couns.</td>
<td></td>
</tr>
<tr>
<td>2 days</td>
<td>Interview</td>
<td>Guidance Couns.</td>
<td></td>
</tr>
<tr>
<td>5 days</td>
<td>Observe on site prgms.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Vocational**

<table>
<thead>
<tr>
<th>2 days</th>
<th>Interview Sch.</th>
<th>5 days</th>
<th>2 days</th>
<th>Interview Voc.</th>
<th>5 days</th>
<th>Observes post sec. prgms.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 days</td>
<td>Visit sch.</td>
<td>prgms.</td>
<td></td>
<td>Rehab. Couns.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Requirements**

*Participating students completed products including: a transition checklist, a series of observations, and a paper on the "state-of -the-art" of transition in their district/county.

**Program Evaluation**

The evaluation component of the training grant centered around student participants and their practicum supervisors. As one part of this component, project personnel developed and field tested an attitude scale concerned with individuals with disabilities and aspects of transition. This attitude scale was utilized as a pre and post test instrument with all students. Although only first year data has been collected, preliminary analysis indicates that the instrument does have some sensitivity in measuring attitude changes of participating students.

Another evaluation component was evaluation of the preservice Transition course, briefly discussed earlier in this paper. One of the problems cited on student evaluations of the community-based speakers was their (general) inability to be brief and concise - "most took too long to make too few points." A second course evaluation component concerned transition course competencies. Students felt that there was too little time for adequate coverage of 14 competencies (particularly in light of the time taken by community-based speakers) during a four week period. Off-campus inservice students are taking the transition course over a semester and have not completed it as of this writing.

Evaluation of the Practicum experience took the form of both process and product evaluation. Cooperating practicum/internship supervisors and university practicum supervisors rated students' ability to carry out the assignments and the resulting products. Students rated their supervisors, assignments, and their own products - products were shared with all participating students. Some practicum students also chose to share their reports with the districts/counties- as yet, little feedback has been received on the value of this information. In general, process and product ratings were very positive from all raters; one difficulty reported by the full-time internship rehabilitation counselors was that other activities made it difficult to find times to schedule transition practicum activities. This information has resulted...
in planned modifications of the practicum for preservice rehabilitation counselors. To date no inservice counselors have participated in practicum.

A final planned evaluation component of the project is a follow-up of program completers. This component is designed to contact the program completers and respective employers. Inservice counselor program completers are currently beginning their first positions following graduation and will be followed-up at six-month intervals.

References


Placement decisions concerning students with disabilities often hinge on the availability of qualified personnel. Despite the best efforts of many administrators to hire teachers with the proper certification, positions are often filled by individuals who are not certified or in some cases not filled at all. School districts must resort to a variety of alternatives to ensure that students' rights to an appropriate education are not violated. Because of questions which arise concerning personnel qualifications or placement decisions, "appropriate education" is often left open to debate. The difficulty in making appropriate placement decisions is compounded by issues such as lack of qualified personnel or low numbers of students. This is certainly a problem when we consider the educational decisions made for students with emotional disabilities or behavior disorders. Although shortages of qualified personnel are widespread, the problem is much more prevalent and longer lived in rural school districts.

Rural school districts are often faced with low numbers of students with emotional disabilities or behavior disorders as well as a rather small pool of qualified applicants for teaching positions. Also, because of limited numbers of students, administrators are reluctant to commit funds to facilities designed to meet the specific needs of this population. These factors contribute to a situation which often stretches the resourcefulness of IEP teams in making placement and curriculum decisions. Placement decisions are often made, not on the basis of the student's educational need, but on the extent to which the available options approximate an appropriate placement. Students with serious emotional disabilities or behavior disorders are found in "generic" resource classrooms in which the teacher may have little or no training in working with this population. Administrators in rural districts try to solve the problem of appropriate placement for these students by resorting to the use of placement options which they believe to be a reasonable approximation of the needed service delivery model. Also, teachers are often hired "out of field" on "emergency" or temporary certificates to work with these students.

Teacher training programs are faced with students who have several years of experience in the field, but little or no formal training or solid theoretical foundation. Despite the teacher shortages faced by many rural districts, teacher training programs continue to use categorical organizational plans or to focus on generic plans which emphasize mild disabilities. The dilemma faced by these students as they enter the teaching field
is that they may be placed in a generic classroom in which the
district has chosen to describe as being for all disabilities.
Because the teacher lacks skills needed for the specialized needs
of certain disability areas, success as a teacher may be an
illusive goal. The results for students with serious emotional
disabilities or behavior disorders are placements in situations
which put them at risk for making educational progress.

The need for qualified teachers of students with emotional
disabilities or behavior disorders is certainly at a crisis stage
in many rural districts. Random reports from teachers and
administrators paint a grim picture of students receiving
inappropriate or no services. News stories of physical abuse by
teachers add to the sense of panic which many district officials
feel. Simply looking at numbers of identified students and
certified teachers does not tell the whole story. A need exists
for an analysis of the service delivery options in place in rural
districts for students with emotional disabilities or behavior
disorders. To prepare teachers for the reality of special
education in rural districts, teacher training programs must work
with state departments of education and school districts in
determining the best options for serving this population and
assessing the skills needed by teachers.

Purpose

The purpose of this study was to: examine the service
delivery models being used in rural school districts to educate
students with emotional disabilities or behavior disorders;
examine the need for teachers of students with emotional
disabilities or behavior disorders in rural districts; determine
the attitudes of rural directors of special education and
teachers of students with emotional disabilities or behavior
disorders relative to placement options and teacher training
requirements. The extent to which director and teacher attitudes
impact on the nature or effectiveness of service delivery will
also be examined.

Review of literature

Placement decisions concerning students with disabilities
often hinge on the availability of qualified personnel (Bacon,
1988; Connery, 1988; Brassard & Barnes, 1987). Despite the best
efforts of many administrators in rural districts to effectively
serve students with emotional handicaps or behavior disorders,
these students continue to be unserved or underserved (Connery,
1988). School districts must resort to a variety of alternatives
to ensure that students' rights to an appropriate education are
not violated (Upper Midwest Regional Resource Center, 1981).

As noted by Peterson and Maddux (1988), rural school
districts often have difficulty providing special education
services in the areas of funding, recruitment, retention,
transportation, and staff development. Bacon (1988), suggests
that the low incidence of behavior disorders in rural districts is a factor in decisions to provide reduced services or to not provide teachers who specialize in behavior disorders. Lingo and Henry (1990) discuss the need for coordination of related services for students with behavior disorders in rural schools. Limited resources may require the designation of a faculty member to take on the responsibility of coordinator of services for students with behavior disorders. Given the limited availability of faculty trained in the area of emotional disabilities or behavior disorders, such a plan could be difficult to implement in many districts.

In a study of rural special education services, Beare (1986) arrived at the conclusion that cross-categorical teacher training and licensure were more appropriate for improving services for students with mild disabilities than relying upon categorical resource rooms. Joyce and Wienke (1988) relate problems in adequately serving children with behavior disorders in rural areas to the inability of universities and colleges to provide teacher training which meets the myriad of diversity found in the many different rural communities across the country. Their recommendation is that training must focus on the specific needs of rural school districts. Brownell and Smith (1992) discussed the high attrition rates in special education and their effects on the provision of quality services for special needs students. They also point out crisis conditions exist due to "greater teacher shortages and decreased preservice enrollments in special education. Thompson (1992) has noted the "confusion" which exists among regular classroom teachers relative to the needs of students designated as learning disabled, emotionally handicapped, and educable mentally handicapped. The need for inservice to ameliorate this confusion is indicative of the lack of training which exists among teachers outside of special education. Given the practice of utilizing "temporary", "emergency", or "out-of-field" certificates to employ teachers lacking training in special education, the notion of teachers "confused" about the needs of a particular disability area are indeed disconcerting.

Joyce and Wienke (1988) found that faculty at teacher training institutions and teachers in the field are in agreement concerning the competencies needed to teach students with behavior disorders. Heller, Spooner, Spooner, and Algozzine (1992) suggest that efforts to integrate special education students into regular classrooms will only work if teacher training programs utilize "an intensive, structured, planned, and applied program incorporating special education principles into the preparation of general education teachers." Rural school districts are indeed vulnerable, given the limited availability of trained teachers and the limited knowledge base of the general education faculty. The lack of qualified personnel indeed intensifies the difficulty in making appropriate placement decisions concerning students with emotional disabilities or behavior disorders.
The current move toward more inclusive educational arrangements might, on the surface, seem like a possible solution to the problem of limited resources faced by rural districts. Inclusive special education programs have been described as options which more adequately prepare students for community involvement (Stainback & Stainback, 1992; and Gaylord-Ross, 1989). Questions surrounding the inclusion of students with behavior disorders, particularly those with aggressive behaviors, may not be easily settled. The issue of moving students into the mainstream of educational life has been a part of the current special education scene for some time, however, it has intensified in recent years, particularly in relation to students with moderate to profound disabilities. Inclusion options must now be considered as part of the continuum of services when discussing the education of students with behavior disorders. How well rural districts are able to provide inclusive arrangements will depend largely on the availability of adequate resources, trained faculty, and favorable attitudes toward the implementation of inclusion models.

The present study addresses issues related to placement of students with emotional disabilities or behavior disorders and training of teachers who provide special education services for these students. Directors of special education and teachers of students with emotional disabilities or behavior disorders were examined. The purpose of this study was to determine the nature of attitudes of Directors and teachers relative to placement options and need for training. Specifically, we were trying to determine if particular placement options were favored over others and whether participants had differing attitudes relative to the training needs of teachers of this population.

Method

Subjects

Subjects were members of two groups of special educators. The first group consisted of the special education directors of districts designated as rural by the state legislature (N = 68). Rural districts in South Carolina are defined as those comprised of 50% or more rural population. The second group consisted of one teacher from each rural district employing teachers of students with emotional disabilities or behavior disorders (N = 43).

The entire population of South Carolina Directors of Special Education in rural school districts were surveyed. A participation rate of 85.29% was attained from these directors. Teachers were selected at random from those district employing teachers of students with emotional disabilities or behavior disorders. For the teachers, a 72% response rate was attained.
Teacher Questionnaire

The Teacher questionnaire consisted of two parts. Part I was comprised of 12 items designed to gather background information about the participants. Questions related to number of years of experience, certification, teaching responsibilities, service delivery model, number of students served daily, and on going training. Part II consisted of a 16 item Likert-type survey designed to ascertain attitudes relative to placement options, training requirements, need for collaboration among school districts, and regular classroom adjustments.

The Director questionnaire consisted of one part. The questionnaire was a duplicate of that used in Part II of the Teacher survey.

Results

Findings were organized into 4 categories: teacher background; service delivery options; certification or training requirements; and inter-district collaboration. For questions on the Director questionnaire and Part II of the Teacher questionnaire, single item chi-square analyses were conducted for each item to determine the significance of the frequency distribution. Data were organized into a 2 X 1 table omitting the neutral cell and collapsing the strongly agree and agree cells into one agree cell and collapsing the strongly disagree and disagree cells into one disagree cell (see Table 1). The teacher background information was examined and reported as percentages of total responses.

Teacher Background

Of the teachers responding to the questionnaire, 48.4% had 11 or more years of special education experience. Experience of more than 10 years teaching students with emotional disabilities was reported by 25.8% of the respondents. Eighty-seven percent of the respondents were certified in the area of emotional disabilities. All respondents were officially listed as a teacher of students with emotional disabilities or behavior disorders. Masters degrees were held by 54.8% of the respondents. Self-contained classrooms were indicated as the service delivery model utilized by 71% of the respondents. None of the respondents indicated resource room as the model utilized, and only 16% indicated use of the itinerant model. One respondent indicated that they were involved in the use of an inclusion model for delivery of services. Teachers serving over 10 students with emotional disabilities each day was 19%.

Service Delivery Options

Teachers and Directors were asked to indicate whether they agreed or disagreed with statements concerning placement options for students with emotional disabilities or behavior disorders.
Each of the first four items indicated that students with emotional disabilities were best served by a particular service delivery model. Of the Directors responding to the first item, 19.23% indicated that they agreed that these students are best served by the itinerant model. Of those responding, 48.07% disagreed, \( X^2 (1) = 9.89, p < .01 \). Teachers' responses were 16.2% and 56.7% respectively, \( X^2 (1) = 8.79, p < .01 \). Directors' responses related to agreement or disagreement with the use of the self-contained model were 28.8% agree and 40.4% disagree, \( X^2 (1) = 5.61, p < .05 \). Teachers' responses were 48.6% agree and 24.3% disagree, \( X^2 (1) = 4.9 p < .05 \). Director's responses concerning the use of the resource room model were 38.5% agree and 17.3% disagree, \( X^2 (1) = 12.49 p < .001 \). Of the teachers responding, 19% agreed and 35% disagreed, \( X^2 (1) = 8.78 p < .01 \). Those Directors agreeing with the use of the full inclusion model as the best choice measured 17%. Of those responding, 45% disagreed, \( X^2 (1) = 11.79 p < .001 \).

In response to the statement concerning whether students with emotional handicaps should be excluded from regular classroom until their behavior is brought under control, 44% of Directors agreed and 40% disagreed, \( X^2 (1) = 1.49, n.s. \). Of the teachers responding, 57% agreed and 32% disagreed, \( X^2 (1) = 2.62, n.s. \). In response to the statement that aggressive emotionally handicapped students should not be allowed to participate in regular class activities, 40% of Directors agreed and 48% disagreed, \( X^2 (1) = 1.27, n.s. \). Of the teachers responding, 54% agreed and 41% disagreed, \( X^2 (1) = .78, n.s. \). Of the Directors responding to the statement suggesting that students with emotional handicaps should spend 100% of the school day in the regular classroom regardless of the severity of their disability, 3.5% agreed and 95% disagreed, \( X^2 (1) = 47.41, p < .001 \). For teachers, the breakdown was 2.7% agree and 97.3% disagree, \( X^2 (1) = 33.1, p < .001 \).

**Certification or Training**

Directors and Teachers were asked to respond to five statements relating to the certification and training required to teach students with emotional disabilities or behavior disorders. The first item stated that teachers of students with emotional handicaps should be fully certified as a teacher of the emotionally handicapped prior to teaching these students. Of the Directors responding, 64% agreed and 28% disagreed, \( X^2 (1) = 8.04, p < .01 \). Of the Teachers responding, 62% agreed and 16% disagreed, \( X^2 (1) = 9.54, p < .01 \). In response to the statement of whether teachers certified in other areas of special education should be able to teach students with emotional disabilities without additional training, the percentage of Directors who agreed was 7% and the percentage who disagreed was 85%, \( X^2 (1) = 25.70, p < .001 \). For those teachers responding, 11% agreed and 70% disagreed, \( X^2 (1) = 14.4, p < .001 \). In response to the statement of whether teachers with no special education
background should be allowed to teach in EH classrooms if they attend workshops, 5% of Directors agreed and 79% disagreed, $\chi^2 (1) = 32.37$, $p < .001$. For teachers, 11% agreed and 76% disagreed $\chi^2 (1) = 16.25$, $p < .001$.

Inter-district Collaboration

Directors of special education agreed (67%) that rural school districts with few students with EH should form special education cooperatives with other school districts, $\chi^2 (1) = 20.14$, $p < .001$. Despite their concerns about limited resources, however, they very much disagreed with the statement that districts with limited resources should not be required to serve students with emotional disabilities (88%), $\chi^2 (1) = 40.00$, $p < .001$.

Discussion

As we move toward the twenty-first century, we are rethinking our ideas relative to the way we serve students with disabilities. In addition to the basic concept of mainstreaming, in recent times educators have been confronted with the Regular Education Initiative and full inclusion of students with more severe disabilities or with behaviors difficult to manage in regular classroom situations. Despite efforts by educational leaders to bring about change, success is often limited by the lack of enthusiasm among the rank and file educators. If concepts such as full inclusion or the Regular Education Initiative are to work, teachers and administrators must be prepared to objectively consider the merits of these concepts.

This study attempted to determine how administrators and teachers feel about placement and certification issues. Both of these issues are important to the successful delivery of services to students with emotional disabilities who reside in rural school districts. Because rural districts so often lack resources, or do not have enough students to hire a person trained in the area of behavior disorders, students with emotional disabilities run the risk of receiving less than adequate intervention. By surveying Directors, we were able to ascertain how those who have some input into personnel decision making feel about issues related to the amount of training one needs to serve students with emotional disabilities.

Our research has indicated that, for the most part, Directors of special education generally favor placement in a resource room for students with emotional disabilities. In contrast, teachers tended to favor the use of the self-contained model. It should be noted, that the majority of the teachers who responded served in self-contained classrooms. It would seem that administrators are somewhat more favorable toward a modicum of integration for students with emotional disabilities than teachers. This difference may need to be addressed as we rethink
the general structure of special education and the method of service delivery most effective for this population.

Teachers and Directors are very much opposed to the use of full inclusion for students with emotional disabilities. They also tend to favor a more gradual integration for this population as opposed to total inclusion. This is especially true for those students regarded as aggressive.

Directors and Teachers feel that more training is needed by those who serve students with emotional disabilities. This is especially important given the difficulty encountered by many rural districts in finding certified personnel for vacant positions. It should be noted, that several respondents indicated that this is the ideal and not the reality. Thus, while they recognize that teachers should be fully certified prior to working with students with emotional disabilities, they still are willing to hire those who do not meet this criteria, as indicated by their response to the statements related to training. This feeling was shared by the teachers who responded to the survey. These findings indicate that administrators will continue to utilize those who are not fully certified and teachers will be willing to take positions for which they are not fully trained. These findings have strong implications for the future educational needs of rural students with emotional disabilities.

Finally, it appears that administrators and teachers recognize the need to address limited resources in rural school districts. Both groups of respondents felt that special education cooperatives might be a way to provide services for students with emotional disabilities in those districts with few students. Such attitudes indicate a willingness to consider options which go beyond the utilization of out-of-field personnel. Such cooperatives have been tried in several states as a means of bringing special education services to those districts with few students. The fact that 67% of the special education directors in South Carolina's rural school districts favor the formation of cooperatives is an indication that they recognize the severity of the need for qualified personnel to serve students with emotional disabilities or behavior disorders.

This study has opened the door to the examination of the attitudes of those who serve students with emotional disabilities in rural school districts. The issues addressed should assist educators to better understand the extent to which change is possible and the likelihood that the rank and file educator will support those changes. Although several respondents to our survey suggested that one cannot generalize about students with emotional disabilities, the vast majority of Directors and teachers were willing to respond specifically to the survey. It is apparent that administrators and teachers have opinions concerning appropriate placement and are willing to express these opinions without qualification. Such a willingness could serve
as somewhat of a barrier as we enter an era in which traditional placement options are being reconsidered.

The need for a well trained corps of teachers to serve students with emotional disabilities is great. The willingness of educators to lower standards in order to provide services is of great concern. The resistance to inclusion and limited pool of qualified teachers may prove to be a problem as rural districts strive to keep pace with the mainstream of the educational process.
References


Heller, W., Spooner, M., Spooner, F., & Algozzine, B. Helping general educators accommodate students with disabilities. *Teacher Education and Special Education, 15*, 269-274.


Table 1: Rural Special Education Services for students with emotional disabilities: Agreement and Disagreement.

<table>
<thead>
<tr>
<th></th>
<th>A</th>
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<tbody>
<tr>
<td>1. Students with emotional handicaps are best served by using an itinerant model.</td>
<td>Directors % 19.23 48.08</td>
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<tr>
<td></td>
<td>Teachers % 16.22 56.76</td>
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<tr>
<td>2. Students with emotional handicaps are best served in a self-contained classroom.</td>
<td>Directors % 28.85 40.38</td>
<td></td>
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<tr>
<td></td>
<td>Teachers % 48.65 24.32</td>
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<tr>
<td>3. Students with emotional handicaps are best served in a resource room.</td>
<td>Directors % 38.46 17.31</td>
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<tr>
<td></td>
<td>Teachers % 18.92 35.14</td>
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<td>4. Students with emotional handicaps are best served using a full inclusion model.</td>
<td>Directors % 16.98 45.3</td>
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<td></td>
<td>Teachers % 10.81 54.05</td>
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<tr>
<td>5. Students with emotional handicaps should be excluded from the regular classroom until their behavior is brought under control.</td>
<td>Directors % 38.25 40.35</td>
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<tr>
<td></td>
<td>Teachers % 56.76 32.43</td>
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<tr>
<td>6. Students with emotional handicaps should be gradually phased into mainstream classes when they are ready to participate.</td>
<td>Directors % 85.97 7.01</td>
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<td></td>
<td>Teachers % 91.89 8.11</td>
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<tr>
<td>7. Aggressive emotionally handicapped students should not be allowed to participate in regular class activities.</td>
<td>Directors % 39.66 48.27</td>
<td></td>
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<td></td>
<td>Teachers % 54.05 40.54</td>
<td></td>
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<tr>
<td>8. Students with emotional handicaps should spend 100% of the school day in the regular classroom regardless of the severity of their disability. Directors % 3.51 94.74</td>
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<tr>
<td></td>
<td>Teachers % 2.70 97.3</td>
<td></td>
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<tr>
<td>9. Teachers of students with emotional handicaps should be fully certified as a teacher of the emotionally handicapped prior to teaching this population.</td>
<td>Directors % 63.79 27.59</td>
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<td></td>
<td>Teachers % 62.16 16.22</td>
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10. Teachers with a special education background in an area(s) other than EH should be allowed to teach in EH classrooms without additional training.

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<tr>
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<th>Presidents</th>
<th>Teachers</th>
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<tbody>
<tr>
<td>Directors %</td>
<td>7.02</td>
<td>10.82</td>
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<tr>
<td>Teachers %</td>
<td>70.17</td>
<td>70.27</td>
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</table>

11. Teachers with a special education background in an area(s) other than EH should be allowed to teach in EH classrooms while completing additional training.

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<th>Presidents</th>
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<tbody>
<tr>
<td>Directors %</td>
<td>59.65</td>
<td>59.46</td>
</tr>
<tr>
<td>Teachers %</td>
<td>14.03</td>
<td>18.92</td>
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12. Teachers with no special education background should be allowed to teach in EH classrooms if they attend workshops.

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<th>Presidents</th>
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<tr>
<td>Directors %</td>
<td>5.26</td>
<td>10.82</td>
</tr>
<tr>
<td>Teachers %</td>
<td>78.95</td>
<td>75.68</td>
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</table>

13. Teachers with no special education background should be allowed to teach in EH classrooms if they begin the process for completing EH certification.

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<th>Presidents</th>
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<tbody>
<tr>
<td>Directors %</td>
<td>24.14</td>
<td>24.32</td>
</tr>
<tr>
<td>Teachers %</td>
<td>53.45</td>
<td>54.05</td>
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14. Rural school districts with few students with EH should form special education cooperatives with other school districts.

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<th>Presidents</th>
<th>Teachers</th>
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<tbody>
<tr>
<td>Directors %</td>
<td>67.24</td>
<td>67.57</td>
</tr>
<tr>
<td>Teachers %</td>
<td>12.07</td>
<td>18.92</td>
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</table>

15. Rural school districts with limited resources should not be required to serve students with emotional handicaps.

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<thead>
<tr>
<th></th>
<th>Presidents</th>
<th>Teachers</th>
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</thead>
<tbody>
<tr>
<td>Directors %</td>
<td>5.17</td>
<td>16.22</td>
</tr>
<tr>
<td>Teachers %</td>
<td>87.93</td>
<td>75.66</td>
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</table>

16. The number of students in regular education classrooms should be reduced if a student with emotional handicaps is placed in the classroom.

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<th></th>
<th>Presidents</th>
<th>Teachers</th>
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<tbody>
<tr>
<td>Directors %</td>
<td>67.29</td>
<td>75.66</td>
</tr>
<tr>
<td>Teachers %</td>
<td>18.96</td>
<td>5.41</td>
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WORKING TOGETHER FOR TOTAL QUALITY LEARNING IN RURAL SETTINGS

INTRODUCTION

According to Deming (1993) a system of schools is not merely pupils, teachers, school boards and parents working separately to achieve their own aim. It should be that groups work together to achieve aims such as growth and development of the children by preparing them to be contributing members of society. This principle, outlined by Deming, has guided three rural school districts in South Carolina as they have piloted Total Quality Learning in their school systems.

POLITICAL/SOCIAL ISSUES

"Quality," Holt (1993) states as used in "Total Quality Management is disliked by Deming." Deming prefers the notion of "variation." The Cross Tribune (Wisconsin), January 26, 1993, reported that six of the fourteen principles of Deming have been adapted for use in the quality school movement. In this quality school movement political and social issues have emerged. Glasser (1990) suggests that we try to overcome the anti-education attitude that the students display in the schools through a new method of managing schools that focuses on quality. Glasser (1990) further suggests that students are the workers and today almost none are doing high-quality work in the regular academic classes. He looks at the students not simply as workers in the schools, but also they are the products of our schools.

Examining another social issue that is a "hot topic" is the movement away from the mainstreaming of students with special needs to "full inclusion." Covey (1989) addresses the issue of self-fulfilling prophecies with his story about the computer in England that was accidently programmed incorrectly. It labeled a class of "bright" kids "dumb" kids and a class of supposedly "dumb" kids as "bright." Five months later, the error was discovered and the children were tested without telling anyone about the computer error. The measured I.Q. of the "bright" kids had gone down significantly. The teacher had viewed the group as uncooperative and difficult to teach. The I.Q. scores of the supposedly "dumb" group had gone up. The teachers had treated them as bright and the teachers had reflected high expectations and worth for the kids. The teachers reported that they felt for some reason their methods were not working so they changed their teaching methods. Apparently, learner concerns were nothing more or less than teacher inflexibility.

Senge (1990) points out that the young child entering school discovers quickly that the name of the game is getting the correct answers and avoiding mistakes. This statement reflects the reality of politics and the values of society and is carried forward into the work place. Bonstingl (1992) views Schools of Quality as a place which prepares young
people for not only lifelong learning, but life-wide learning as well. He defines this as learning that pervades every aspect of life's journey.

As part of the political and social process, attempts at restructuring in school districts have consisted of enormous and time-consuming efforts to institute school base management. Molen, Ogawa, and Kranz (1990) state that there is no certainty that site-base management, by itself, has had, or ever will have, any significant impact on student achievement. Yet the media continues to compare us to the Japanese saying that we are failing to bring up the standards of student achievement.

Deming (1986) stated that education, industry, and government should interact as a system. Thurow (1990) points out that we have to raise our level of expectation for the so called average person. He points out that the countries that are succeeding are those that look at it differently: for them, "A good education system is one that educates the bottom of the population the best, because they man the processes. If they're not well educated, you can't use the technologies even if you invent them."

Robert Reich (1991), after working very closely with Deming, stated that the Japanese are beating us because "Japan's greatest educational success has been to ensure that even its slowest learners achieve a relatively high level of proficiency." Benjamin Bloom's (1968) research demonstrated that under the right conditions ninety-eight percent of the students can do as well on tests as the upper twenty-five percent. This is where quality management and education merge in their belief that the bottom half of students has value and can be educated. As Kozol (1992) states the buildings and equipment in many schools are appallingly inadequate. He feels that we should have an intelligent plan and stop the system of "throwing money at the problem." Nicholas Lemann (1991) in his study of why government-funded programs fail pointed out that the most straightforward way that new federal programs can win acceptance is to show that they will work.

Society has to recognize that celebrations are very important to one's self-esteem. Peters (1987) stated that we infrequently celebrate those little accomplishments we want to encourage in students, when for many it could make all the difference to their positive self-esteem. Deming (1993) views "recognition" and "pats on the back" as the essential tools of the effective manager, parent or teacher. Programs that reinforce the political and social issues in the schools could foster assemblies where the students, teachers and staff are recognized for progress. Peer Tutorial Programs could be incorporated in cooperative learning groups to help lower-achieving peers. Slower learners are paired and grouped with more capable students, whose strengths in an area enable them to bring their slower peers in the group up to mastery level. Another successful program that has taken off across the United States is the Homework Center concept. The data on the success of these programs is still being gathered.

Csikszentmihalyl (1990) found in his research that work relationships are far more important than perks and rewards. The willingness to empower pupils, teachers, school boards and parents was found to be an essential ingredient for success of Total Quality Learning in schools. He also found that frequent feedback is especially important for achieving long-term goals. He found that when goals are in place and feedback is provided, quality performance becomes "addictive." In America and in American
industry, we are now beginning to see how important sense of community and unity of purpose can be. Roland Barth (1991) reinforces this idea when he says that the quality of a school is a reflection of the quality of the relationships among adults in that school. The empowerment of teachers and students rather than just administrators promotes the collective decision making necessary for paradigm shifting.

BEGINNINGS/PROCESS

The piloting of Total Quality Learning in three rural school districts in Greenwood County grew out of a Greenwood Chamber of Commerce initiative. The Greenwood Area Chamber of Commerce had developed over the past five years a focus on lifelong learning. The Chamber realized that a community that cared about learning; where everyone accepted responsibility for encouraging and enabling all people to reach their full potential would become a positive contributor to the economic well-being and quality of life. To carry out their mission the Greenwood Chamber of Commerce involved the three local school districts.

The foundations were set by first involving the Superintendents and "teams" of educators from each of the districts and schools in attending workshops and seminars on Total Quality Learning. As the knowledge and commitment of the participants grew they went back to their respective districts and schools to share their knowledge and to create an action plan for implementation. With teachers, pupils, parents, and school board members, each school district refined their mission and vision statements for their schools. As part of the continuous improvement process, they began viewing all school activities as a system designed to achieve their missions and visions. They viewed the heart of their continuous improvement the engagement of communities of learners in the processes of acquiring knowledge, generating knowledge and applying knowledge to improve every process in the system.

To effectively implement such a transformation in their districts and develop their action plan, they realized that empowerment of all parties would have to be accepted. Teachers would have to be empowered to offer the freedom and power of knowledge and that student/parent goals would drive much of the process. Unifying core principles for the development and implementation of an action plan would be integrity, openness, empowerment, trust, perseverance, equity, and cooperation.

The action plan that was developed in each of the school districts revolved around the mission or purpose they had identified. After mission and vision statements had been formulated they determined the methods to accomplish their purposes and the support they would need. They also defined the organizational structures that would be required for implementation of a systems focus.

Methods to accomplish the purpose included personal leadership development, research, provision of guides for continuous process improvement encompassing direct communication, involvement, and feedback, and the shifting of the psychological environment whereby anticipation/innovation by doing different things and doing things differently are accepted.

Support for the development of Total Quality Learning involved coaching that
understood the concept of learning by doing, a focus on processes, not people, and the freedom to admit mistakes.

Teams of individuals were at the core of the organizational structure. Through teams a balance was created between independence and interdependence. A win-win perspective emerged among team members and enthusiasm about work and learning. All team members were empowered and accepted responsibility for continuous improvement. The teams also began a year long professional development course in Total Quality Learning through Lander University where their knowledge of Total Quality Learning could be enhanced and their action plans refined and implemented through on-site research. The involvement in the professional development course provided the mechanism for networking with educators from all three school districts and higher education institutions in the geographical area.

CONCLUSION

To optimize the development of human capabilities requires a balanced and integrated approach. It requires an environment in which self-interest is not paramount and where shared mission, shared vision, shared principles and the joy of work and learning exist. Through Total Quality Learning three rural school districts made a commitment to continuous improvement. They viewed their systems and all of its processes as vehicles to serve to develop students in their abilities to learn, to think, to act effectively and to function successfully in a changing world.
References


Emerging trends indicate that students in Special Education will need "intensive and innovative educational efforts" to be initiated in order for these students to compete in the workplace after graduation (Woodward, 1992, p.8). Sloane (1989) stated that technology for students in Special Education can be a great equalizer when competing with non-disabled peers. Public Law 101-476, Individual's Disability Education Act, mandates a change be made in the area of adaptive and assistive technology (AAT). Individuals with disabilities are to be given access to technology that may benefit them educationally; however, the topic of technology causes a degree of concern in many of the professionals involved for several reasons.

While few disagree with the potential benefit to the students involved, various reasons for the lack of use of technology in Special Education exists. Three categories of problems are teacher concerns, funding feasibility and concerns about change. The teachers' concerns tend to center around how AAT affects them personally. According to Brady and Langford (1986), teachers have viewed mastering the various forms of AAT as difficult. The constant changes in the latest technology provide a general lack of knowledge of what's available. These constant changes in turn can cause a problem with mastering the latest technology, including the jargon. Some teachers feel there are few personal or professional rewards involved with AAT.

Funding is a second cause for concern since school funding is limited and AAT is often very expensive. Most school districts, which have budgets for AAT, have a limited budget to spend. According to Woodward (1992), decreasing technology budgets may cause a shift away from technology. These are all very real concerns for professionals; however, one of the major problems with implementing technology is the concern about change.

Change can be a cause of concern for anyone, especially professionals venturing into the unknown. The magnitude of the problem concerning change and AAT is not easily portrayed because of a lack of statistical information on school districts using AAT, but, several authors have addressed the issue. Brady and Langford (1986) wrote specifically about the concerns over change, created by AAT, for principals, administrators, and teachers. These concerns were addressed in the previous paragraph. In the past decade, there has been much research concerning change within a school system.

One study, Dessemination Efforts Supporting School Improvement (DESSI), reported the following findings in 1982 (Hord, 1992). According to this study, five factors were needed for teachers to successfully implement change. Curricular and instructional guidelines must be clearly defined and developed. Training must be credible. The teachers involved must be committed to the change. A fourth factor is
the provision of continuous support and assistance for the teachers. Finally, administrators must provide firm guidance and assistance.

Similarly, a study on school administrators in 1975 by Berman and McLaughlin indicated that the principal's support is a primary factor in the successful implementation of change (Boyd, 1992). "The principal's contribution to implementation lies in giving moral support to the staff and in creating a culture that gives the project 'legitimacy' rather than in 'how to do it' advise" (Boyd, 1992, p. 6). The principal's support lends an attitude of seriousness to the project or change. At the same time, the principal is available to provide resources in addition to moral support.

Lack of statistical data makes it difficult to determine how much AAT is utilized in the schools. Concerns over change may be one of the deciding factors on the utilization of AAT within school districts. This study will explore several aspects of this topic. Quantitative information on how schools are using or not using AAT will be collected. Leadership styles will be explored to determine the effects of certain styles on change. In addition, a qualitative approach will be used to determine views of AAT and to discover some possible unknown aspects of the problem. An attempt will be made to discover any link between an individual's leadership style, placement within the Stages of Concern, and perceptions concerning AAT policies.

Change Concerns/Facilitation

Various approaches have been utilized when a change is warranted or desired. Historically, changes were viewed organizationally. More recent attention has placed the focus of change on people (Hord, 1992). Literature on the subject suggests that people are often resistant to change. One example of this in the business industry is found in the automobile industry (Martel, 1986). Chevrolet, Ford, and Chrysler followed similar business strategies. Each year, the former year's car model was given a few changes to create a slightly bigger and better car that would provide more profit for little investment. The strategy worked until people decided they wanted a smaller, more economic car, due to rising fuel costs. These manufacturers refused to make the change indicated by the people, because of a lack of profit at the time. Foreign car manufacturers managed to get a foothold in the American car economy with small, economic cars. With a focus on the people involved in the change, foreign car manufacturers won and kept a place in the American car industry. It is conceivable that, had the American car manufacturers made the changes indicated by the people, they would have remained the leaders in the car industry in America.

Education has seen a similar response to change. During the past few decades, change has been approached from various angles. Basically, the two areas targeted for change by these approaches are the organization and the people. Chin and Benne, House, and Sashkin and Egermeier described three models of change (Hord, 1992). Each of the three models were similar in characteristics. An assumption, within the first model, is that individual's are basically rational and will make whatever changes are right. The second model focuses on using some power, such as legislative or moral, to force the individual to change. The third category views the individual as an active participant in the change process. According to Hord (1992) each of these models is still being used by educators. Research indicates, however, that the first and second models
of change, while widely used, are showing few results. The third model, with the focus on people as change agents who have decision-making power, has shown more success, therefore, indicating a change of focus is needed.

A longitudinal study of change and change facilitators resulted in the creation of the Concerns-Based Adoption Model (CBAM) which contains a focus on the people aspect of change (Hord, 1992). CBAM is based on assumptions that change is a process which involves personal growth. Personal experiences with change cause change to occur at different rates. CBAM contains three components which include the following: 1) Stages of Concern, (how people react to or feel about change); Levels of Use, (how individuals behave relative to change); and Innovation Configuration (how the change is being put into effect in classrooms and schools. For this study, CBAM has been adapted to relate to the field of Adaptive and Assistive Technology. One focus of this model is on the change facilitator, who is often in a leadership position.

One link that is present in any undertaking of change is leadership. Leadership styles, according to research, seem to have an effect on implementation of changes (Hord, 1984; Hall, 1987; Avi-Itzhak & Ben-Peretz, 1987; Hord, 1991; and Mendez-Morse, 1993). Three basics styles of leadership have been identified by Hall (1987); Initiator, Manager and Responder. Hord (1984) defines these styles in the following terms: "the initiator makes it happen, the manager helps it happen, and the responder lets it happen." Research indicates that the initiator and manager styles lead to change more often (Hord, 1984).

Blake, et al (1982) created the Academic Administrator Grid which is based on two basic concerns that administrators have: 1) concern for institutional performance and 2) concern for people. The Grid contains five styles of leadership ranging from Team Administrator, who places a high value on performance and people, to the Caretaker Administrator, who places very little value on performance or people. Each of the five leadership styles center around these two concerns; however, they vary in which concern holds the most importance. A description of each style is contained in a later section.

Research Concerns

Several concerns for researching change in relation to AAT exist. Implementing AAT requires reconceptualization of service delivery. When reconceptualizing, change is involved. Historically change has been found to be an obstacle with an innovation. Change can be a barrier to the use of AAT, but successful change has occurred in other areas. Using quantitative methods is difficult because no data are available for the hypothesis. Qualitative methods open up as a viable option. The qualitative method is designed to explore and extend the topic were little research and few studies have occurred.

Purpose

The lack of use of technology in Special Education may be due to the perceptions of change and the placement of education professionals within the Stages of Concern. This is an exploratory study designed to research the aspect of change as it relates to
AAT. A second purpose of this study is to look at the feasibility of a qualitative study versus a quantitative study in research concerning the change process and to ascertain whether the same information is gathered from each type of study. The comparison of quantitative and qualitative methods will be developed through the following methodology.

Methodology

This pilot study was conducted in a rural school district. This school district has five elementary schools, one junior high school and one high school. Six individuals participated in the study.

Participants

Six individuals were interviewed. These individuals consisted of four administrators (three district level and one principal) and two teachers. Both teachers are female. Two of the administrators are female and two are male. Respondents had been in the district an average of 7 years. Amount of teaching experience ranged from 6 months to 36 years, with an average of 17.4 years. All administrators had earned a Master's degree and both teachers had Bachelor's degrees.

In the area of AAT, knowledge and use differed. Two out of four administrators indicated they had been involved with AAT at least 4 years. One administrator had been involved with AAT for 2-3 years. One administrator was not involved with AAT at all. Both teachers stated that they had worked with AAT about 1 year. Of the administrators, three considered themselves novices and one a nonuser. One teacher considered herself to be a novice, while the other considered herself to be at the intermediate level. Only one of the six respondents had ever received formal training with AAT.

Research Instruments

Each individual instrument will be addressed in this section. The first instrument to be discussed is the Stages of Concern Questionnaire. The second section will be on the Academic Administrator Grid. The final section will address the Facilitating Change with Adaptive and Assistive Technology Questionnaire.

Stages of Concern Questionnaire (SoCQ). The SoCQ focuses on the placement of people regarding their concerns about change or an innovation. The SoCQ was created after three and a half years of research on changes within schools. The questionnaire was adapted to relate specifically to changes related to AAT. Each questionnaire consists of 35 statements. Participants rated these statements on a scale of 0-7. Low numbers indicate a lack of concern, whereas high numbers indicate high concern.

Once completed, the results were tabulated according to a worksheet provided. Five statements are representative of each of the seven stages. The sums of the scores for each of the five statements in each stage represents the raw score. These raw scores are converted to percentiles, using a table, and are then graphed for visual display.

Academic Administrator Grid. The Grid was designed to pinpoint leadership styles for professionals in the field of education. More specifically, the Grid was created to
demonstrate effective leadership styles within the educational environment. The vertical line of the Grid depicts Concern for People and uses coordinates one through nine. The horizontal line represents Concern for Institutional Performance and also uses coordinates one through nine. The first of the five styles of leadership is the Caretaker Administrator who has little concern for people or performance. The Authority-Obedience Administrator has a low concern for people and a high concern for performance. The Comfortable and Pleasant Administrator is characterized by a high concern for people and a low concern for performance. Balancing morale and performance is preferred by the Constituency-Centered Administrator. Finally, the Team Administrator displays a high concern for people and performance and is viewed as a facilitator of change.

Facilitating Change with Adaptive and Assistive Technology Questionnaire (AATO). In an attempt to discover underlying barriers to the use of AAT, a qualitative questionnaire was created. This questionnaire focuses on participants perceptions of four general issues concerning AAT. The first issue addressed was school district policies about AAT and participants' perceptions of these policies. Secondly, decision making processes concerning AAT within the district was explored. Next, staff development and support services for AAT were addressed. Finally, participants' views about change within the education system and their role in the change were discussed.

Four general questions, concerning policies, were asked of all participants. Administrators were asked ten additional questions specific to their roles in the district with regard to AAT. The teachers were asked five additional questions specific to their roles concerning AAT.

Procedures
Each respondent participated in an interview. Three of the respondents requested anonymity. All instruments were administered during the interview. Before each instrument, directions were given for completing the forms. No time limits were imposed. The SoCQ and Academic Administrator Grid were given before the AATQ. When the first two instruments were completed, the third instrument was administered in an interview format. An attempt was made to write down all of the respondents' answers during the interview.

Results
Results of the three instruments were closely related in several instances. According to a qualitative instrument, several types of administration styles were present in this school district ranging from Team Administrator to the Comfortable and Pleasant Administrator. The majority of the participants rated themselves as Team Administrators, indicating a preference for team leadership and productivity. This seems to hold true for this school district, as most decision-making seems to be made by teams, according to the AATQ. This style of leadership, however, does not guarantee that changes will be made quickly as was noted on the results of the SoCQ. Five respondents stated that changes were needed, but wanted only gradual change. One administrator felt the people most affected by the change should facilitate it. Two participants indicated a need for radical restructuring of the teaching process was required for successful implementation of AAT.
The district has several teams designed to provide the district with technology; bases on the scores from the SoCQ, changes appears to be a major barrier. Results show that the district is aware of and concerned with AAT, but it is not the main priority. In a seven stage model, levels 0-6, schools who are successfully implementing and integrating AAT should score at minimum level 6. For this school district, the overall group mean score was in Level 1, Stage of Concern, indicating they were still at the information gathering stage concerning AAT. One respondent remarked that many people are "talking the talk, but not walking the walk" indicating that more is being said about AAT than is being done.

The AATQ, a qualitative instrument, gave insight into several issues that were present in this district. While the participants did not agree on the specific policies concerning AAT, four indicated that the school district supplied whatever the students needed. Financial consideration was an issues. A specific budget for AAT was mentioned by four participant; however, this was a small portion of the overall technology budget for the entire district. One respondent expressed concern that the district was "robbing Peter to pay Paul" by using so much money for the benefit of one student when it could be spent to benefit many students.

Indications

The primary objective of this study was to explore change as it relates to AAT. As indicated above, results are positive toward change as a variable in the acceptance and utilization of AAT. The secondary objective of this study was to discover if the same information could be gathered from qualitative and quantitative methods. Due to the complexity of the issue, a combination of qualitative and quantitative methodology is indicated. The SoCQ and the AATQ were somewhat similar in their findings. Both indicated the school district was still in the early stages of change concerning AAT. The second questionnaire gave more insight into participants' views and school district practices. Many barriers to the use of AAT in the schools exist. One of the strongest barriers seems to be a willingness to change personal perceptions and school systems. Perhaps this barrier needs to be removed before the others barriers can be dealt with effectively.

In this case, the Academic Administrator Grid results seemed to agree with the participants' responses on the AATQ regarding leadership styles. Both indicated a preference for team leadership within the school district. The AATQ provided additional insight into types of teams and their responsibilities.

It would be wise to use caution since this data is based on one district and only a few participants; however, results were constant. It is important to recognize the global aspects of this research, not just the specific. The automobile industry mentioned earlier refused to make the indicated changes and suffered the consequences then and continue to be affected by those decisions. A positive aspect of this research is that administrators are aware of the issues of AAT and many know that change is imminent. The administrators in this study seemed to be proactive toward change in most areas. Perhaps AAT will begin to emerge as a more prominent feature in the education of students with special needs in this district as well as others.
References


OUTCOMES FOR SPECIAL EDUCATION

The focus of this paper will be to raise the reader's understanding of Educational Outcomes and Outcomes potential impact upon on special education students, in particular those with emotional or behavioral disabilities.

To accomplish this goal, in the first section of this paper a working definition of an Outcome will be presented along with the need for Outcomes development in the context of special education. In the second section of this paper the suggested Program Outcomes for the State of Michigan will be presented. Finally a practical application of these Outcomes will be presented.

WHAT IS AN OUTCOME?

As defined and understood Outcomes are broadly stated goals which describe the student's expected competencies when they have finished either their entire educational career or a portion of that career (e.g. completion of the middle school years). The very nature of the Outcomes drives the educational process toward a more integrated performance oriented system.

Spady and Marshall define Outcomes in the following manner:

"What is most essential for our students to know, be able to do and be like in order to be successful once they have graduated. (Spady & Marshall 1991)"

They elaborate further by stating that "an Outcome is a successful demonstration of learning that occurs at the culminating point of a set of learning experiences" (Spady & Marshall 1991).

For purposes of defining their Core Curriculum Goals, the State of Michigan utilizes the following definition:

Outcomes are desirable learnings which students will need in order to select and effectively function in their life-career roles of workers, family members, citizens, students, and self-fulfilled individuals. An educational outcome is defined as a statement of a student...
performance as a result of an educational experience. (State of Michigan 1991).

In both definitions it can be clearly seen that the end product remains in focus at all times and that the goal is always student-need centered.

Outcomes go beyond merely providing a focus for student development. They in fact can and should drive the entire educational endeavor. Spady & Marshall (1991) describe the following four principles the Outcomes adherents work to follow:

1. **Ensure Clarity of Focus on Outcomes of Significance.** Culminating demonstrations become the starting point, focal point, and ultimate goal of curricular design and instruction.

2. **Design Down from Ultimate Outcomes.** Curriculum and instructional design inherently should carefully proceed backward from the culminating demonstrations... thereby ensuring successful culminating demonstrations.

3. **Emphasize High Expectations for all to Succeed.** Outcomes should represent a high level of challenge for all students and all students should be expected to accomplish them.

4. **Provide Expanded Opportunity and Support for Learning Success.** Time should be used as a flexible resource rather than a predefined absolute in both instructional design and delivery.

In understanding the above it becomes clear that those who choose to implement a program based upon outcomes must reexamine all aspects of their program. Nothing is taken for granted as being acceptable. All areas, programs, and courses must contribute to student's making progress toward achieving the ultimate goal.

**WHY OUTCOMES IN SPECIAL EDUCATION?**

In preparing the Suggested Michigan Outcomes for Special Education** the researchers noted the following:

1. **Children with Emotional Impairments have,** traditionally been underserved when compared to children with other disabilities.

2. **Programs for Children with Emotional Impairments** have not been evaluated positively. Indicating a poor quality of service for such students.
3. There exist a general lack of standardization in behavioral/therapeutic approaches. This lack of standardization makes research on program effectiveness difficult.

The above issues highlight a two tiered problem when dealing with children who have emotional impairments. On the one hand, there is little agreement as to what is needed to help individual students, and on the other, there is little upon which to base a focused effort for all students.

There exists in literature and research a plethora of intervention models. Unfortunately, no one model has proven itself successful in dealing with all of the varieties and combinations of emotional & behavioral impairments within the school setting. As a result those in the field have developed highly individualized and eclectic approaches in dealing with the problems as presented. This results in taking a highly individualized approach to each student which, on the negative side, often results in a shortsighted myopic view of student needs. The teacher or the program ends up planning only for the day or at best a single school year. This is often done without respect to the long term needs of the student when compared to all other students with whom they will be in competition with when they leave the school setting. The lack of an overall framework or set of expectations from which to work encourages such shortsighted responses.

If, as the researchers noted above assert, there is a lack of standardization in programs for students with emotional problems then the shortsighted planning described above must contribute negatively to the process of serving this group of children. Individual services to students should be driven in part by what is needed to be successful in society after the student leaves the educational system. In this context the establishment of Exit Outcomes becomes rational and needed from a systems point of view. Such establishment should provide the framework from which the practitioner can plan and work toward reaching an end goal which has been defined in a greater context.

Outcomes can become a template/overlay to the entire special education system guiding the individual interventions employed toward a common goal, successful integration into the society at large after formal school ends. It is hypothesized that such a template would allow for thorough and appropriate evaluation of services to those students with emotional &/or behavior disabilities which, in the end, should result in better overall services for this group.
ORGANIZATION OF STATE OUTCOMES

All outcomes are organized in the same way, except Outcome 1.1, which deals with the completion of local general graduation requirements. Each outcome is stated briefly, followed by a CLARIFICATION statement. This is then followed by a list of PERFORMANCE EXPECTATIONS and then four grade level lists of SELECTED EDUCATIONAL CONSIDERATIONS.

OUTCOME STATEMENT

This is a general statement that is intended to be both functional and easily understood. It is meant to be an important aspect of competence in learning and daily life. Educators and parents should be able to recognize its general focus. (Example: 3.2 Ability to participate appropriately in group activities.)

CLARIFICATION

This statement helps to further explain the outcome and provide a rationale for the outcome. It also describes the scope of the outcome's coverage.

PERFORMANCE EXPECTATIONS

These are a list of behaviors that the student must perform to achieve the outcome. They are the basis of assessment on how well the student performs on each outcome and lead to strategies used for evaluation of the student's performance. (Example: 3.2 Interacts with group members in a constructive manner)

SELECTED EDUCATIONAL CONSIDERATIONS

This series of statements is written for the following levels: entering 4th grade, entering 6th grade, entering 9th grade, and exiting 12th grade. They represent a list of knowledge, skills, experiences, or attitudes that educators feel are relevant to a student's probability of achieving a given outcome. These statements do not guarantee that a student will achieve an outcome, and to achieve an outcome the student does not have to acquire all of the knowledge, skills, or attitudes listed. These are mainly points that are relevant to increasing the student's opportunity to achieve the outcome and suggest possible areas of teacher intervention and/or instruction. (Example: 3.2 Entering 4th Grade; The student understands the rules and responsibilities of various age-appropriate
activities.)

The relationship between each outcome and its detailed information is well defined. The outcome is a general focus or end point of the student's education. It reflects one or more educational need of students with emotional impairments. The Performance Expectations then represent those behaviors that reflect achievement of the outcome and are the basis for evaluation. The Selected Educational Considerations are suggestions of the type of information a student might acquire to help achieve the outcome.

The next page provides an overview of all 16 outcomes currently being considered for adoption by the State of Michigan.

EVALUATION OF OUTCOMES

An outcome is actually an end product or goal and is a general statement. Therefore, the evaluation of the outcome is done on its parts, the Performance Expectations. The means of evaluating these expectations can vary with each individual teacher and/or program. Suggested means of evaluation should include a wide and varied set of different techniques. These techniques can include, but are not limited to the following: 1) Teacher observations, 2) Daily work grades, 3) Test grades, 4) Interviews with the student, 5) End products of a project, and 6) Responses to simulations and/or decision making situations.

With such a variety of evaluation possibilities, it is necessary to organize the results. This can be done by creating a student portfolio which includes selected materials from the list of evaluation techniques. Not only does this help organize the evaluation, but it provides a means for following through with the work on an outcome as the student progresses from grade to grade. The portfolio contents can then help determine the students mastery of the final goal or outcome.
OVERVIEW OF EXPECTED OUTCOMES: EMOTIONAL IMPAIRMENT

**Category 1: Basic Academics**

1.1 Completion of local school minimum graduation requirements

**Category 2: Emotional Development**

2.1 Ability to effectively advocate for self.
2.2 Ability to evaluate emotions and personal conduct.

**Category 3: Prosocial Skills and Adaptive Behavior Social Skills**

3.1 Understanding the elements inherent in typical emotional and social relationships.
3.2 Ability to participate appropriately in group activities.
3.3 Ability to convey thoughts and feelings in socially acceptable ways.

**Category 4: Task Completion**

4.1 Ability to implement routines, apply strategies, and follow through to task completion.
4.2 Ability to access resources to complete tasks effectively.

**Category 5: Life-style Precautions**

5.1 Comprehensive knowledge of behaviors that are potentially harmful and strategies for prevention and response.
5.2 Understanding of civil and criminal laws.
5.3 Understanding of consequences of sexual activity and the strategies for dealing with those consequences.
5.4 Ability to construct leisure routines.

**Category 6: Prevocational, Vocational, and Career Education**

6.1 Knowledge of realistic vocational options.
6.2 Ability use effective job procurement strategies.

**Category 7: Parenting and Adult Living Education**

7.1 Ability to assume responsibilities associated with the operation of a living environment.
7.2 Ability to care for self and others.
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