This paper discusses a model for providing technical assistance to teachers of students with severe/profound mental handicaps who teach in rural areas. The model, known as the Institute for Educators of Students with Severe/Profound Mental Handicaps, is presently in its second successful year in the state of Georgia. Its unique design provides a practicum and methods course during the summer with follow-up visits to the participants' actual classrooms during the school year. The model design, its evaluation data, strengths and weaknesses, and administrative concerns for implementation are addressed. (Author/TS)
A MODEL FOR PROVIDING TECHNICAL ASSISTANCE FOR EDUCATORS OF STUDENTS WITH SEVERE HANDICAPS IN RURAL AREAS

Abstract: This paper discusses a model for providing technical assistance to teachers of students with severe/profound mental handicaps who teach in rural areas. The model, known as the Institute for Educators of Students with Severe/Profound Mental Handicaps is presently in its second successful year in the state of Georgia. Its unique design provides a practicum and methods course during the summer with follow-up visits to the participants' actual classrooms during the school year. The model design, its evaluation data, strengths and weaknesses and administrative concerns for implementation are addressed.

There is a critical shortage of appropriately trained teachers of students with severe/profound mental handicaps in rural areas. In addition to an identified national shortage of teachers in the area of severe handicaps (U.S. Department of Education, 1987), one national survey found that out of 57 jurisdictions surveyed, 48 commented on the lack of special education teacher's skills relating to developing Individualized Education Plans (IEPs), participating in multidisciplinary team meetings and understanding due process (McLaughlin, Valdivieso, Spence, & Fuller, 1988). Compounding this problem is the additional lack of training of teachers for the unique needs found in rural areas (McIntosh & Raymond, 1988; Helge, 1984).

In the state of Georgia, a critical need for teachers of students with severe/profound mental handicaps in local school districts outside the metropolitan Atlanta area has been documented through various state Department of Education manpower reports, Local Education Agency (LEA) Comprehension Plans and reports of the Comprehensive System of Personal Development (CSPD) statewide analysis. These sources have shown that 20% of the teachers of students with severe and profound mental handicaps have provisional certification or are not yet fully certified. Additionally, a two year turn over rate for teachers outside metro-Atlanta as well as an increasing number of students with severe and profound mental handicaps being placed in the public school system has attributed to this critical need for teachers. Since Georgia State University is the only degree program in the state in the area of severe handicaps, funds were requested to help meet this personnel training need.

A Special Projects grant from OSERS, Division of Personnel Preparation was awarded to Georgia State University to implement a model titled the Institute for Educators of Students with Severe and Profound Mental Handicaps (the Institute). The Institute's main objective is to provide training in instructional methods to teachers of students with severe and profound mental handicaps who are employed by LEAs outside metro-Atlanta. This project, which began in June 1987, is presently in the process of training its second group of teachers and has shown itself to be an effective model which could easily be replicated in other states.
MODEL DESIGN

The Institute for Educators of Students with Severe and Profound Mental Handicaps primarily consists of three major components. The first component involves the participant selection process and the participant’s preparatory activities. This is followed by a summer program which is the second component of the model. The summer program provides the participants with a methods course covering state-of-the-art techniques for students with severe/profound mental handicaps as well as a practicum to provide hands-on experience. The third component consists of follow-up visits to the participants’ own classrooms during the school year. This component provides the participants with assistance in applying the newly acquired skills to the teacher’s own students and with his/her own particular community resources.

This model is designed to promote the participants’ mastery of a set of competencies. These competencies include assessment techniques, appropriate IEP development, behavior management, curriculum development, vocational training, community based instruction, materials and equipment development, data collection and instructional formats. The activities and competencies in which the participants engage are based on a set of assumptions of current best practice for the education of students with severe and profound mental handicaps. This includes: a) curriculum objectives and activities which are functional and age appropriate for community integration activities; b) design and selection of objectives for functional needs of current and future placement in least restrictive settings; c) placement in an integrated, age appropriate public school campus and d) the principle of partial participation.

Participants and preparatory activities

Each year the LEAs are notified and participant nominees are requested. Ten teachers are selected each year based upon joint decisions of the State Education Agency (SEA) and the Project staff. Participant selection is based on the teacher: a) having no previous training in severe handicaps, b) presently teaching (or is hired to teach) a severe or profound mentally handicapped class, c) teaching outside metro-Atlanta and d) making a commitment to teach in a severe/profound classroom for at least one year after participating in the Institute.

After the participants have been selected and notified, they are sent a reading list and study questions on behavior analysis and assessment. Since the teachers come with varied experience and knowledge, this preparatory activity is designed to aid the teachers in targeting areas of study for review which will be helpful in preparing for the summer.

Summer Component

During the summer session, participants come to the metro-Atlanta area to engage in a seven week program which provides training for the teachers through didactic and practicum activities. During their first week, the study questions they received prior to the summer institute are reviewed. They also have lectures and discussions regarding state of the art techniques in educating students with severe and profound handicaps (methods course). For the remainder of the six weeks, the methods course is continued in the afternoons. During the mornings the teachers participate in a cooperative summer school program for students with severe and profound...
mental handicaps in Dekalb County, GA, under the direct supervision of Georgia State University faculty and Institute staff.

The practicum component consists of 138 contact hours with approximately sixty students with severe handicaps, with chronological ages from six to twenty-one years. Each participant chooses a specific class to instruct from 8:30 a.m. to 12:30 p.m. daily. From 12:30 p.m. to 1:30 p.m., the participants work with other classes on a rotational basis. During the last two weeks of the practicum, they are required to instruct in at least two alternative classes during the morning session. This provides the participants an opportunity to work with a wide range of physical involvements, behavior patterns and chronological ages as well as the ability to "try out" new techniques they have learned in their methods course with a variety of students. All participants are also required to instruct adolescent students in a least one community vocational training site as well as employ community based instruction under the supervision of a designated instructor. To promote an exchange of ideas, the participants team-teach their classes with university master students who are engaged in their practicum experience.

The participants develop summer objectives for each student in the class based on student and ecological assessments, as well as information provided by the regular year teachers. As part of their instructional activities, each participant implements various instruction methodologies, e.g. task analysis, time delay, prompting strategies, self-operated prompting systems, and ongoing data collection and interpretation. Instructional formats include one-to-one and small and large group instruction. Additionally, each participant is required to prepare age-appropriate, functional teaching materials, and use adaptive and communication equipment.

The methods course provides 115 hours of lectures on state of the art techniques in the field for severe and profound mental handicaps. Lectures are presented by professorial staff as well as by specialists in physical therapy, speech-language therapy and adapted physical education. An on site physical therapist is also provided when the students are present. Besides having the specialists present to impart knowledge of their field, the specialists give the participants an opportunity to work with them in developing activities and objectives for the students in their particular field in order to provide participants the experience of being a member of a transdisciplinary team.

Follow-up Component

Since the participating teachers work in rural settings, it is important that they learn how to adapt the principles and techniques to their own students in their particular setting. To aid in this endeavor as well as to ensure generalization of the material, a minimum of three follow-up visits are provided where one of the Institute's staff goes to the teacher's actual classroom during the school year. Technical assistance and feedback is provided to the teacher as well as assistance in setting up community skills training programs and vocational work sites. At the end of the follow-up component, participants are encouraged to continue to contact the staff at Georgia State University if questions arise and they are also invited to join a regional consortium. The participants also receive a newsletter specifically designed for teachers of students with severe/profound mental handicaps and have been invited to contribute to the newsletter.
Evaluation Component

Each year, evaluations are administered covering the preparatory activities, participant's acquisition and generalization of the competencies and effectiveness of the project. The first evaluation component consists of an objective test on the preparatory reading list, upon the participants' arrival to the summer session. IEP objectives which the participants have written during their school year are collected at this time for comparative evaluation at a later time.

The second evaluation area assesses the participant's acquisition and generalization of the competencies. On an objective level, there are examinations given at the summer site covering the material presented during the methods course. As part of the integrated evaluation process of the competencies, the participants design and implement at least two task programs and specific programming for targeted students during the summer institute. Participants are also required to prepare a paper on community/functional training in a curriculum area of their interest. Teachers of adolescent age students are requested to do their papers on community based vocational training.

The follow-up component addresses evaluation of the participant's generalization of the competencies. This is partially accomplished through the requirement of constructing three task programs to be used with their students. A paper on how to program for generalization of specific areas of instruction in their own classroom is required as well.

Evaluation of the participant's applied teaching ability is examined through observations of the participants' teaching. The practicum checklist form used during the summer site evaluates such areas as: selection of appropriate instruction objectives for modification of behavioral deficits and behavioral excesses, selection of observation techniques, selection of instructional stimuli, development and selection of intervention strategies, intervention, data collection, programming for generalization, instructional evaluation and group instruction, organization of activities, dealing with emergencies professionalism. The form used during follow-up visits, known as the Classroom Review Checklist form, includes such areas as: assessment, curriculum, IEP objectives, parental and therapist input, schedule and instructional formats, instructional techniques, data collection, adapted positioning, instructional material, teacher's classroom behavior, interaction with on-handicapped and use of paraprofessional. Although both forms provided the necessary feedback to the participants, the second summer of the project substituted the Classroom Review Checklist form instead of the original practicum form due to the participants' suggestions and to provide greater continuity of feedback.

Through classroom and follow-up observations, feedback is provided to the participants verbally, as well as through the evaluation forms. Additionally, the participants have some of their instruction video taped during the summer session. Upon seeing the playback, the participants are provided with additional feedback and discussion.

The third evaluation component is regarded as an examination of the project. This consists of four major elements. The first, which reflects the successfulness of the project, is the number of participants to successfully meet criteria for mastery of the competencies. The second element is the results of the participant's post training evaluation form. This evaluation is partially given at the end of the summer institute to assess any deficiencies as well as at the end of the follow-up visits. The evaluation covers preparatory activities, summer institute, follow-up training, competencies,
teaching procedures and staff. A third evaluation is made of the pre- and post-training by evaluating the IEP objectives. This is based upon Hunt, Goetz, and Anderson's rating sheet for IEP analysis. Finally, there is an Advisory Committee review.

RESULTS OF YEARS 1 AND 2

Participants and Preparatory activities

Thirty-six nominations were received for the first year and forty-five nominations for the second year. From this pool of nominations, ten participants were selected for the first year and, due to budget limitations, nine for the second year in accordance with stated criteria. Selected teachers were from locations distributed throughout the state of Georgia and with a mean of 2.5 years of experience teaching students with severe or profound mental handicaps.

On the first day of the summer institute, the participants were tested on study questions they had received, based on the text they were to have read prior to their arrival. Scores ranged from 66 to 97 for the first year and from 62 to 94 on the second year. Four participants fell below the minimum 85% standard they were to achieve in the first year and two participants were below this level in the second year. The first year participants demonstrated that many of the concepts regarding behaviors modification were known, but they were unfamiliar with the terminology and certain elements of data collection. The second year's participants were more scattered in their deficiencies. Individual review of the deficient areas were conducted as well as group lecture and review with additional reading as indicated.

Summer and Follow-up Components

To aid in evaluating the teachers' knowledge of the principles and techniques taught during the methods course, examinations were given. The first year participants all achieved passing scores on their exams with most scoring in the high B to low A range. Seven of the second year participants scored well, falling into the A and B range. However, two students had difficulty with the exams and made unacceptable scores. Additional individual review was given covering the deficit areas. The two teachers who had difficulty with the exams, showed systematic increases in their applied skills in the classroom during the summer.

There was an increase in performance for each area of the practicum evaluation forms from the interim scores to the final evaluation for all participants. During the first summer, the mean group score in the practicum evaluation form showed the greatest improvement in the areas of selecting appropriate skills from assessment, selecting instructional stimuli, selection of observation techniques, use of data collection and programming for generalization. The least amount of increase was in general professionalism which was already high (See figure 1). The second summer substituted the Classroom Review Checklist. Areas of greatest improvement were assessment, curriculum development, instructional techniques and data collection (See figure 2). Both forms reflected fairly high scores for the interim period, with even better results from the end of the summer evaluation. The fairly high interim scores can at least be partially attributed to the teachers having already received guidance in their practicum in developing appropriate instructional programming for the students in their assigned classroom. To more accurately demonstrate the teacher's level of improvement, the teacher's performance should be evaluated at the
beginning of the practicum experience as well as the interim and final
evaluations. However, an initial evaluation would still be influenced by the
lectures and discussions preceding it.

When examining the first year participant's performance on the
Classroom Review Checklist for the follow-up visits, there is a high degree of
maintenance found during the first follow-up visit of the competencies
acquired during the summer institute. An increase in each category is
present by the last follow-up visit. (See figure 3). Areas showing the greatest
increase include scheduling, instructional formats, instructional techniques
and interaction with non-handicapped peers. The second year participants
have not as yet completed their follow-up visits, although it appears that they
also have achieved a high degree of maintenance at this point.

The follow-up visits have provided assistance to the teachers in aiding
them to implement the skills and strategies learned over the summer to their
own classroom. During these visits assistance, instruction, and feedback
concerning the following points arose: a) assistance in planning the class
schedules, b) confirmation of functional goals and objectives; c) interventions
for maladaptive behaviors; d) implementation of various teaching techniques;
e) planning an implementation of community instruction; f) specific
compensatory strategies for motor and sensory impairments; g) interaction
activities with non-handicapped, and h) individualized development of
materials, e.g., microswitches, and adjustment of adaptive equipment.

Additional information concerning these points and additional follow-up on
problematic areas was covered on subsequent visits.

Program evaluation
The 1987-88 participants completed questionnaires to evaluate the
Institute in its entirety. A Likert scale was utilized with 1 being "strongly
agree" and 5 being "strongly disagree". The mean scores were above 2.0
except for a mean score of 2.1 for facilities. For the second year participants,
a preliminary evaluation of the various aspects of the summer program was
completed prior to the participants' departure from Atlanta. The mean scores
of the participants ranged from 1.1 to 2.1. In the written comments there
was a suggestion for additional follow-up visits.

To compare pre- and post-training, a comparison is made between the
participants' IEP's they had written prior to their participation in the
Institute with those they have written afterwards. The IEP is evaluated
across curriculum areas with each goal being rated a 1 if it meets the criteria
of an indicator of best practices, or a 0 if it is not present. An increase in each
category is present with significant increases in programming for
generalization and perfect scores in teaching with age appropriate materials
and working on basic skills. The interaction activity is slightly higher than
before training, but remains low. Although there was usually some type of
interaction planned with non-handicapped peers as reflected on the follow-up
visit graph, this was not planned for on the IEPs. Further information and
consultation was provided in that area to the participants and was
emphasized to the second year participants.

All of the first year participants have successfully met the criteria for
mastery of competencies.

DISCUSSION AND PROGRAM ADAPTATIONS
The model's greatest strength is its two component format. The seven
week summer institute allows the teacher the opportunity to be exposed to a
large range of students, and receive quality instruction from the professorial
staff of Georgia State University and various experts in pertinent fields. The second component of follow-up visits provide the teacher with technical assistance in applying and adapting the techniques to their own classroom.

The greatest weakness of the project is the inability of some teachers to participate due to the length of a seven week institute. Several alterations could be made to the model to alleviate this potential problem. The summer institute could be offered for less time. Practicum time could be decreased to accommodate a redistribution of lecture time to result in an overall shortened program. Further practical experience could be provided by increasing the number of follow-up visits to the participants’ classrooms. Further cuts in the material covered could further decrease the length of the summer stay and the material could be presented at the time of follow-up visits specifically adapted for the participant’s own classroom. An alternate design could be to have the participants meet for three weeks prior to the students arrival and have a shortened practicum. This has the advantage of familiarizing the participants with most of the principles and techniques to allow them to select the appropriate instructional technique, curriculum, or material which they have just learned. When the majority of the methods course is given concomitantly with the practicum, the teacher learns some techniques near the end of the summer which may have been useful at the beginning of the practicum. However, if the practicum is shortened to accommodate this variation, the participant has the disadvantage of not being able to try out all of the newly learned techniques and not seeing the effects of these techniques.

Although this model has been successfully implemented using a major university in an urban area, the Institute model could be modified to allow for successful implementation in varied settings with differing needs and resources. If the model is offered in regional areas, the difficulty of being away from home for seven weeks would be alleviated since this would allow the participants to drive to and from the Institute in a reasonable amount of time. When setting up a summer practicum, an enrichment program could be offered at a community church or recreational center for a half-day. This program could optionally consist of a range of mental handicaps (mild to profound) as well as students without disabilities to promote appropriate peer interactions and further the teacher’s experience in integrated programming. If an enrollment fee is used, the money collected could help pay for operating costs. The teachers could be informed to bring material from their own classrooms to be used during the practicum. The participants could work with these students for a half-day. Institute staff could provide the methods course in the afternoon.

If having teachers participate in a summer program is not feasible, an alternate model could be adopted. Regional Host Classrooms around the state could be selected where teachers from surrounding counties meet two days a month and receive technical assistance. During each meeting, the teachers receive training in state of the art techniques in severe handicaps and are provided applied experiences with the students in the classroom. This model is currently being implemented in the state of Georgia through the Bureau for Students with Severe Handicaps. It is funded through a state grant and is housed and directed from Georgia State University. This alternative model has the advantage of reaching a larger number of students in a school year as well as avoiding the problem of not being able to commit to a seven week summer institute. However, the Institute model provides more experience with a larger variety of students as well as having the methods course taught by professorial staff and other experts in the field. Also the
Technical Assistance Model

Institute has the advantage of having the follow-up in the teacher's own classroom which allows individual problem solving and teaching with the teacher's own students. It is possible that a combination of the two models may be the most appropriate for some situations.

The Institute model can be replicated exactly as it has been presented or the proposed adaptations can be made. Although certain components of the model can be used by teacher and teacher trainer to enhance their program, providing the methods course and practicum experience without providing individualized follow-up in their classroom is considered incomplete. Only by providing additional follow-up and training which addresses the teacher's particular needs in his/her own classroom and community, can there be assured an increase in competency. Replication of the model will aid in providing appropriate, quality educational services to students with severe/profound handicaps (or other low incidence populations) in rural areas as well as direct practical applications to teachers and trainers of teachers.

References


Technical Assistance Model

Evaluation of Teacher Performance During Summer Program, 1987

Figure 1

Evaluation of Teacher Performance During Summer Program, 1988

Figure 2
Technical Assistance Model

Evaluation of Teacher Performance During Follow-up Visits, 1987-1988

Figure 3