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ABSTRACT

The papers in this collection are divided into five sections: literacy, correctional education, multicultural and issues of diversity, technology, and general education. The articles include: "Creating a Literate Society through Home School Instruction" (Doris A. Henry); "Inclusive Strategies for Content Area Teaching" (Jeanne M. Jacobson); "Becoming Literate: Schooling and Global Involvement" (Rita Roth); "History of Correctional Education" (Thom Gehring; Carolyn Eggleston); "The Delivery of Special Education Inservice Training to Educators in Correctional Settings Via Audio and Computer Conferences: A Collaborative Problem Solving Approach" (Roseanne Hessmiller); "Building International/Cultural Awareness and Understanding through Bibliotherapy: Correctional Education Approaches in Different Cultures" (Salvatore M. Messina); "Using Multicultural Literature in Teaching To Promote International Awareness" (Thomas W. Bean); "Teaching in the Multicultural Classroom" (Yvonne Callaway, Evelyn Mahmud, and Wanda Cook-Robinson); "Harmony and Diversity" (Paul M. Hollingsworth, Keith R. Burnett, and Roy Winstead); "Celebrating Diversity: Enhancing Multicultural Appreciation" (Dorothy Lee Singleton and Nancy Maszta); "Transcultural Health: Principles and Practices" (Susan C. Slanin); "Technology: Contrasts and Complexities--Small Private Universities and Large Comprehensive Public Universities" (Jacquelyn Alexander and James Yates); "Technology Supported Teacher Education: Implementing a Global Vision" (Kathleen L. Daly); "Environmental Physics: A Conceptual Approach to the Study of Science" (Thomas B. Cob); "Creating Collaborative Coalitions To Meet the Challenge of Diverse Urban Classrooms" (Donna Evans and Cheryl Fountain); "Attitudes and Values in Formal Environmental Education: The Case of Quebec" (France Jutras); "The Teacher Researcher: From Promise to Power" (Jane McGraw); "A Comparison of Education of Principals in the Philippines with California" (Arthur J. Townley), June H. Schmeider, and Cesar A. Hidalgo); and "Basic Economics Tests in Japan: The Results in High Schools and the Comparison with University Students" (Michio Yamaoka). (EH)

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**Proceedings of the
International Congress
on Challenges to
Education:
Balancing Unity and
Diversity in a
Changing World**

**Stanley L. Swartz
Conference Chair**

**Turtle Bay Hilton, Oahu, Hawaii
July 6 - 8, 1994**

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**Proceedings of the
International Congress
on Challenges to
Education:
Balancing Unity and
Diversity in a
Changing World**

Keynote Speakers

Marie Clay

**Promoting Literacy Worldwide: Lifting the Burden of
Illiteracy**

Rabbi Marvin Hier

Memory Speaks: The Challenge of the Future in the Past

M. C. Jesus Francisco Galaz-Fontes

Educational Challenges in the Mexican/U.S. Border

Ted Price

Yesterday, Today, and Tomorrow in Correctional Education

Vincent Greaney, Sr.

Worldwide Literacy: Causes and Consequences

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CREATING A LITERATE SOCIETY THROUGH HOME SCHOOL INSTRUCTION

Doris A. Henry
University of Memphis

Literacy is basic for a society to obtain information, update knowledge, and minimally, to function. Research has shown the mother of the family has a significant impact on the education of her children. An educated mother assists with her children's education and cares for their health and nutritional needs. When a mother is illiterate, she can neither instill the values of education for future generations nor perform such essential but mundane tasks as reading labels on medicine bottles.

Over three million Afghan refugees reside in Pakistan. Several million Afghans who live in Afghanistan have not had the benefit of education for over a decade, especially females. The estimated literacy rate for all Afghan females is approximately five percent.

Schools have traditionally been the most common approach to educating a society. For many Afghan females, attending a school away from home has been difficult. Lycette (1993) recommended that females in developing countries receive *home school instruction*. This is defined as a small group of adult females receiving instruction from a teacher in a home in their community. Little is known about the preparation of teachers for home schooling.

A study conducted in 1993 assessed the effectiveness of a pilot teacher training program for female adult literacy. Interview and survey methods were employed. Thirty-six illiterate, adult female Afghan refugees participated in six home schools located in private residents in Peshawar, Pakistan.

The results of the study were: (1) teachers must have strong instructional skills, (2) overcoming cultural barriers and safety considerations are paramount, (3) additional teacher training for working with illiterate adult learners is needed, and 4) class size and duration of instruction should be extended. Home school instruction is thus seen as an effective method to educate illiterate females in developing countries.

HOW TO BECOME BILINGUAL

Leif Isberg

University College of Falun Borlänge

The Swedish language is difficult to learn and is seldom spoken by people outside Sweden. To be able to communicate with people from foreign countries, the Swedish people have to learn a second language. In Swedish compulsory school English is the second language and German or French is usually the third. Problems that exist when learning the second or third language include providing the students with materials containing an up-to-date version of the language in question and creating situations that facilitate the students' learning.

The aim of this study is to focus on those two problems. An arrangement has been made with a university in the U.S.A. and one in England to provide articles to give the students material containing an up-to-date version of the English language. Those articles are then adapted to a computer program that is directed by multimedia techniques. This program also gives the students a possibility to listen to an Englishman reading the text and to compare their own English accent with the Englishman's. In order to facilitate the students' capacity to understand the spoken language, they study untexted videofilms and then try to write down the dialogue spoken.

The role of the teacher in this study is not to teach in a traditional manner; instead the teacher acts more like a coach helping each student to solve his or her problems.

INCLUSIVE STRATEGIES FOR CONTENT AREA TEACHING

Jeanne M. Jacobson
Western Michigan University

Learning through literacy must parallel learning to be literate if students are to become and remain learners of science, mathematics, and the social studies. Textbook driven instructional methods in the content areas cause students who cannot read well to fall behind and fail. A familiar instructional pattern is for teachers to *cover* the textbook material at a uniform pace, relying primarily on these methods: students look up specified vocabulary words and write definitions, class reads text aloud round-robin fashion, students answer text questions independently, and there is a quiz. These methods ensure on the one hand that the classroom program will progress in an orderly fashion and teachers never need to wonder what they will do next. On the other hand, they also ensure that adept students will not be challenged and those who are not yet adept will be frustrated, and make it likely that school—at least its instructional aspects—will be dreary for students and teachers alike. Most teachers do not need to be exhorted to make their instructional program more powerful—they need to see how to do it. Until they are offered alternative strategies and coherent models for organizing classroom instruction to incorporate them, they will be bound to the ways they themselves were taught, and the ways they see their colleagues teaching. A wide variety of multipurpose, inclusive strategies for content area instruction which use textbooks as resources have been devised and described in the professional literature. It is important to identify ways to introduce, establish, and extend content area knowledge, while emphasizing the importance of wise teacher selection from a repertoire of strategies which enable students with diverse strengths and needs to build a shared knowledge base and establish a strong structure of content understanding.

BECOMING LITERATE: SCHOOLING AND GLOBAL INVOLVEMENT

Rita Roth
Kansas City's Jesuit College

Possibilities for global involvement grow out of an expanded view of literacy and the issue of *difference* and its connection with literacy acquisition in schools. The ability to decode and gain the meaning from written text is a commonly accepted view of literacy. The expanded view sees literacy as the ability to decode and bring personal experience to written text in order to make meaning out of it. This is a crucial distinction, since it infers personal engagement and critique.

Schooling with this *critical literacy* focus could link personal with global concerns. Students encounter difference in their daily lives—in the family, the classroom, the immediate and wider community, and the world of media. Bringing personal experience to written and oral text expands opportunities for shared difference and similarity, for potential understandings of one's own and differing world views.

An expanded view of pedagogy and thinking of pedagogy itself as a form of cultural study (Giroux, 1993) places new dimensions upon the process of schooling. What knowledge is selected? Who selects it? How is it arranged and delivered? How is it received?

With this *critical pedagogy*, the study of language takes on a special significance, particularly at sites where standard English does not dominate. Utilizing teaching/learning strategies that emphasize expressive language as well as receptive, encourages interaction and dialogue. Acknowledging students' personal knowledge, inviting it and incorporating it with school knowledge can provide broader opportunities for connecting individuals with others.

When pedagogy is considered a central aspect of cultural studies, the limitations of traditionally accepted forms of literacy acquisition in school can more readily be seen. This raises strong political and cultural issues that can have a profound impact upon the balance of unity and diversity in a changing world.

ENHANCING LITERACY ACROSS LANGUAGES THROUGH VISUALS

Gloria M. Tang

The University of British Columbia

There are numerous studies which contribute to equity of opportunities for diverse language students to access school knowledge in a changing world. Research conducted in Vancouver and Hong Kong was designed to explore commonalities and differences across two languages which can be used to elicit second language learners' prior knowledge learned in their first language and thus, enhance their learning of content knowledge in a second language. Based on the Knowledge Framework (Mohan 1986), the studies sought to explore the knowledge structures, graphics, and textbook illustrations intermediate/secondary students in Vancouver and Hong Kong encountered and to draw analogies between the experiences of Canadian students and those of Hong Kong students in order to discover commonalities across English and Chinese which could be used to facilitate learning in a second language.

The Knowledge Framework and research findings show that certain knowledge structures and textbook illustrations are common across languages. The common graphic forms and conventions which Canadian and Hong Kong textbook illustrators use and the type of graphics to which intermediate/secondary students in Vancouver and Hong Kong are exposed were studied. The academic graphic literacy of the students was analyzed, concluding that graphic representations of knowledge structures may be an effective tool for making available and activating second language students' prior knowledge learned in their first language. The result is a proposed model which (1) makes use of commonalities across English and Chinese to build and activate students' prior knowledge learned in another language and (2) highlights the differences in linguistic characteristics between the languages to effect the learning of content knowledge for second language learners in multicultural settings.

HISTORY OF CORRECTIONAL EDUCATION

Thom Gehring and Carolyn Eggleston
California State University, San Bernardino

Correctional education trends, the prison reform/correctional education movement, and its classic literature during the periods of development with an emphasis on the 1840-1940 period are considered, including outstanding contributions to the field, correctional education paradigms and anomalies.

Many correctional educators have not had access to the literature of their field. This accrues from several conditions. Few professionals were originally prepared for work in institutional education; instead they were prepared for the related fields. The classic literature is out-of-print and unavailable. Many correctional educators identify with local conditions and infrequently are often anti-education bastions managed by non-educators, which tends to inhibit professionalization.

There are heroes of whom most correctional educators know little. Modern prisons were established as a social reform to end torture and mutilation. This reform movement was led by John Howard, John Henry Pestalozzi, and Elizabeth Fry. After reformers realized how brutal prisons had become, they sought to improve them with education. The prison reform movement was led by Alexander Maconochie, Walter Crofton, and Zebulon Brockway. The effort to *democratize institutions*—as a citizenship strategy—was developed by William George, Thomas Osborne, and Austin MacCormick. The pace of *Cold War* correctional education was set by Anton Makarenko (Soviet Union) and Glenn Kendall and Kenyon Scudder (United States). During the *post-Cold War culture period* contributions by Stephen Duguid and the Ross/Fabiano team from Canada, and David Werner from the United States, have been exemplary.

These periods are examined in terms of paradigm change according to Thomas Kuhn's system. The reform period corresponds to Kuhn's chaos, the prison reform period with the field's first paradigm, democracy with anomalies, Cold War with crisis, and the emphasis on culture with the emerging paradigm. These themes confirm and support correctional educators in their challenging and important work, and introduce new information that will encourage and sustain.

GROWING UP—GETTING OUT—STAYING REAL: A SEARCH FOR INDICATORS OF MATURITY

Sam Halstead

Auckland Institute of Technology

The notion of social maturation as a suitable goal for prison inmates is accepted by correctional educators around the world. Research indicates that a majority of offenders have poor social skills, unrefined value systems, and cognitive deficits. If prisons are populated with underdeveloped people then prison education centres need to become *finishing schools* as well as providers of remedial and mainstream education opportunity.

The concept of maturity includes the range of maturities (physical, emotional, cognitive, and moral/ethical), as well as real indicators and competencies of social maturity. It is questioned whether social maturity really means a *non-criminal lifestyle* and if it is valid to imply that only socially immature people commit crimes.

It is suggested that learning and development will happen when a learner's equilibrium is challenged, stimulated, or upset by the presentation of new concepts and material. Many people do not come to mature understandings of themselves and others because they did not receive, experience, or react to strong triggers for development at crucial periods of their lives. An analysis of social skills, moral education, and cognitive skills theories and programmes from around the world over the past two decades shows the kind of programme characteristics that are most likely to have impact upon offenders. A curriculum model (or modification) has been developed that aims to assist inmates to understand wider ethical and social concepts.

A final question is whether social maturity is, on its own, enough. By defining the term, discussing the competencies, and determining the characteristics of good programmes (and good programme leaders) correctional educators should be better able to carry out an important task on behalf of society.

THE DELIVERY OF SPECIAL EDUCATION INSERVICE TRAINING TO EDUCATORS IN CORRECTIONAL SETTINGS VIA AUDIO AND COMPUTER CONFERENCE: A COLLABORATIVE PROBLEM SOLVING APPROACH

Rosanne Hessmiller
University of New Mexico

A recent study compared the effectiveness of audio and computer conferencing in the delivery of special education training to correctional educators in their workplace. The purpose of the study was to investigate which distance education conferencing system would be better suited to: transfer special education competencies most effectively; allow for collaborative problem solving experiences; sustain communication among the learners and between the instructor and the learners; and allow consultation with mentors and field experts (in Indian health, bilingual education, criminal justice, vocational rehabilitation, mental health, and developmental disabilities).

A course offered by the University of New Mexico entitled *Working with Special Needs Inmates in Correctional Education* was delivered entirely over teleconference into the workplace of educators in 18 correctional facilities throughout New Mexico and Arizona (jails, prisons, juvenile detention centers, psychiatric treatment hospitals, Sheriff's departments, and public school detention homes). Nine correctional facilities received the course over audio conference; nine over the computer. The course presented a series of participant generated problems to be solved. Solutions and strategies were generated individually, in teams, and in small groups. Participants had continuous access via conference to the course instructor and their colleagues, mentor teachers, and field experts from around the state of New Mexico. Electronic staff classrooms were installed in all 18 facilities utilizing either a computer with a modem or a speaker phone with built-in facsimile and answering machine. The researcher worked with the instructor to restructure her traditional course for delivery over audio and computer conference, incorporating collaborative problem solving strategies and ongoing participant access to field experts in New Mexico.

A questionnaire was distributed to all correctional educators participating in the training to ascertain their previous experience with distance education, learning styles, and preference for delivery over a synchronous or asynchronous mode. Pre and post tests were administered to determine the correctional educators' special education knowledge and attitudes toward inmates with disabilities. Group interviews were conducted at the worksites. Computer conferencing software called VAXNotes, designed for group collaboration, was chosen for the computer delivery portion of this course. All audio conferencing activity was taped, and computer conferencing conferences are currently being analyzed to see if the technology supports collaborative learning and sustained communication among the participants. Transcripts of the audio and computer conferences are being analyzed separately and comparatively.

IMPACT OF CRIME ON VICTIMS AND COMMUNITY SAFETY

Joe Maxwell
California Youth Authority

The California Youth Authority (CYA) is one of the largest juvenile correctional agencies in the United States and is committed to program development and delivery in the areas of victims services. One such program is the Impact of Crime on Victims Program.

The curriculum begins with an introduction to the history and status of the victims rights movement. Topics covered are property crime, domestic violence, sexual assault, child and elder abuse, assault, robbery, and homicide. The program emphasizes accountability of the offender for the trauma created to the victim, their family and community, as well as their own victimization as children. Use of local resources and speakers to supplement classroom activities is a key element of this program.

BUILDING INTERNATIONAL/CULTURAL AWARENESS AND UNDERSTANDING THROUGH BIBLIOTHERAPY: CORRECTIONAL EDUCATION APPROACHES IN DIFFERENT CULTURES

Salvatore M. Messina
Trenton State College

Despite the sometimes swagger and bravado of being *street-wise*, the correctional inmate has a limited range of personal experiences and interests. To better get to know himself, others, and the ways of the world beyond his narrow home turf, a psychosocial awareness essential in his rehabilitative education, he could profit greatly from bibliotherapy—the use of books to help people. Indeed, says Brown (1975), “. . . books are just the thing to help change a man’s life, especially his way of thinking.”

In her seminal work in the field, Caroline Shrodes’ 1949 dissertation says that in bibliotherapy three fundamental processes take place between a reader and literature: identification, catharsis, and insight. Through “a shock of recognition” the reader comes to identify, affiliate, or empathize with a real or fictional character or situation in a story. Catharsis takes place when, sharing the character’s emotions, the reader releases his own pent-up, repressed feelings. After the release, the reader can look at *the problem* rationally. Insight finally occurs when the reader can design ways of improving his personality so as to better accept both himself and others.

In addition to developing skill in using bibliotherapy to effect the optimal affective and cognitive changes in the correctional inmate, the bibliotherapist must gain expertise in the methodology of bibliotherapy (i.e., knowledge on how to conduct a bibliotherapeutic session).

As evidenced by the number of books, journals, symposia, and conferences, particularly in the last decade, the increasing use of bibliotherapy for those who get into trouble with the law is noteworthy (McMurrin, 1993; Daniel, 1992; Hymes & Hymes-Berry, 1986). A growing number of counselors, psychologists, and correctional educators claim that in the rehabilitation education of the correctional inmate, bibliotherapy can be used effectively in helping to modify attitudes, to foster self-esteem and self-development, and to promote behavioral change (Shrank & Engels, 1981). Through a symbiotic relationship between literature and psychology, bibliotherapy can help the correctional inmate achieve a broader cultural awareness and a deeper empathy for both cultural differences and similarities—racial, ethnic, and religious.

EDUCATION BEYOND THE WALLS

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Department of Public Safety, Hawaii

Brenda Gayle Bryant

Hawaii Public Broadcast Authority

Dennis Tubbs

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Distance learning is a school without walls. The sophisticated features of modern telecommunications technology allow information to reach a greater number of students at less cost. For correctional facilities, especially the medium and maximum security facilities, distance learning provides an innovative and safe means of bringing instructors into the prison without fear of liability for the safety of the instructor.

A new form of instruction uses live interactive broadcast to demonstrate the power of the television medium and the capacity of the local cable networks. Live interactive telecasts are made from California, showing some of the possibilities for interactive networking within states and across the water to Hawaii and the Pacific Rim. Hawaii has experience in implementing live interactive courses for Hawaii's Corrections Education Program.

USING MULTICULTURAL LITERATURE IN TEACHING TO PROMOTE INTERNATIONAL AWARENESS

Thomas W. Bean
University of Hawaii at Hilo

In any content area it is possible to find literature that enriches textbook readings and course concepts. Yet, Applebee's (1989) national survey of book length works assigned to students in secondary English indicated that no multicultural authors were in the top 10 list of readings and only one woman author was represented. The literary canon in English has been very resistant to change. In addition, most content area teachers are unaware of multicultural literature and unprepared to integrate textbook and trade book selections. Forty five reading autobiographies were analyzed that were produced by preservice content area teachers. Only 57 percent of these future teachers mentioned their English teachers as crucial influences in their current love of reading. They recalled teachers who organized book clubs and modeled reading of captivating literature, particularly literature keyed to the cultural experiences of Hawaiians, Japanese Americans, and other Pacific Island groups. Teachers from subject fields outside English were rarely mentioned. Yet 69 percent of the teachers surveyed made some claims about how they would handle challenging texts and how they might foster students' love of reading. Unfortunately, the great majority of these claims were nonspecific. For example, a future science teacher commented, "I am excited about the integration of reading into content classes."

Two novels dealing with Asian Pacific cross-cultural encounters are considered and strategies for weaving them into the area of world history introduced. The novels, Crew's (1989) *Children of the River*, and Soto's (1992), *Pacific Crossing*, span contemporary Cambodian, European American, Hispanic, and Japanese cultures. Specific teaching strategies and bibliographic material relevant to expanding students' critical thinking in world history are integral parts of this process.

TEACHING IN THE MULTICULTURAL CLASSROOM

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Eastern Michigan University

Evelyn Mahmud

Hamilton (Michigan) High School

Wanda Cook-Robinson

Oakland (Michigan) Schools

In the 21st Century, the students that come together in groups to learn and the experiences they bring to educational endeavors will be broader and more variable than ever before in the history of education. In order for students to gain the greatest benefit from their differences, the classroom experience must address and reflect their differences in a positive and supportive manner. To effectively implement culturally sensitive and efficacious instructional programs, training is a must. By focusing on both cognitive and affective variables that impact the classroom culture, it is expected that increased awareness of multicultural influences on the classroom experience and greater skill in identifying goals and objectives for multicultural groupings of students will result.

The infusion of multicultural awareness and appreciation in the classroom from both theoretical and pragmatic aspects are important and the influence of affect, attribution, and perception on the classroom culture need to be examined. Cultural influences on the classroom environment, the student, the teacher, and the reciprocal relationship among these variables and learning need to be identified. An effective training model is to first develop awareness, then provide experience, and finally, guide participants through critical steps in planning, implementation, and evaluation. The first segment briefly presents a theoretical framework in order to increase cognitive awareness concerning the influences of culture in the classroom. In the second phase, attention is focused on affective awareness through role play and simulation activities, designed to demonstrate the positive impact of cultural inclusion on all students. The final phase provides opportunities to learn and practice goal setting, material selection, and evaluation. Specific attention is given to techniques for utilizing differences to promote positive self-concepts and activities and materials to support extended learning.

DIVERSITY ISSUES IN HIGHER EDUCATION: PLANNING FOR ACCESS AND EQUITY

Gloria Contreras

University of North Texas

The Office for Multicultural Affairs of the University of North Texas has coordinated a comprehensive process for implementing multicultural equity plans for underrepresented minority groups in institutions of higher education for the past five years. The following aspects to managing diversity in higher education are included: planning process, evaluation, networking with other institutions, and issues and problems. The proactive approach is assumed for those institutions committed to human and intellectual diversity across all levels of higher education.

DIVERSITY AND INCLUSION FOR FACULTY OF COLOR IN HIGHER EDUCATION

John S. Gooden and Alison Harmon
Eastern Michigan University

The continuous growth of culturally diverse student populations and the inability to increase minority faculty who serve them, is a matter of great concern for colleges and universities. Schools are being pressured by segments of their communities and accrediting agencies to increase the presence of minority faculty on the campuses. Many believe minority faculty play important roles as mentors and role models who bring a multicultural, multi-dimensional focus to the curriculum, institution, and broader community.

Colleges and universities assert that they are unable to recruit ethnic minorities. They cite geographical location, an unwillingness of potential candidates to relocate to areas that lack the support of a minority community, a shortage of minority candidates with doctoral degrees, and their inability to compete financially with larger, well-known institutions as reasons for the inability to diversify their faculties.

Schools continue to use traditional recruiting methods to address the need to increase minority faculty. Although these strategies should continue to be employed, schools must become more proactive and develop more creative and imaginative strategies to address this problem. Moreover, it is also their responsibility to help ensure the success of minority faculty once employed. Therefore, schools must focus on how minorities are inducted into their culture. Teaching, service, and the pressure to *get published* can be anxiety-provoking for new professors. Minority faculty members confront additional pressures because they usually lack the luxury of ethnic role models and sometimes the benefits of an institutionalized support system during this critical period of induction and tenure.

HARMONY AMID DIVERSITY

Paul M. Hollingsworth, Keith R. Burnett, and Roy Winstead
Brigham Young University, Hawaii

Any experienced teacher recognizes that teaching is a complex and challenging profession. One of the reasons that makes it such a challenging profession is the fact that each child learns differently. These individual differences seem to be true regardless of age and grade level throughout the educational system and are usually a combination of genetic, cultural, and environmental conditions. When you add to this a pattern of thought and behavior learned under a different educational system in a different country, then the task of accommodating individual differences is made even more complex. The United States is a pluralistic society and we are beginning to realize that diversity can be an asset. Diversity also adds responsibility for the teacher and the school. Hawaii's schools are ethnically diverse. This diversity presents major challenges for teachers.

At Brigham Young University, Hawaii, there are students from over 69 different countries in attendance. Multicultural differences are provided for by:

1. Helping these students set realistic expectations in their college programs;
2. Allowing them the space to be who they are in terms of their cultural, religious, and racial identity, while at the same time coming together around common bonds;
3. Providing academic support services and programs so they can succeed;
4. Maintaining effective retention programs;
5. Organizing support systems and groups for students to interact beyond their culture group; and
6. Providing for financial assistance.

Our multicultural diversity in Hawaii is both a challenge and an asset. A pluralistic society requires and encourages an appreciation of differences and a sensitivity to those elements that make us who we are. We must create a society that is sensitive, vibrant, able to meet the challenges facing us as a technological society, and move into the 21st Century.

IN SEARCH OF PRAXIS: THE CULTURAL DIVERSITY PROGRAM AT BOWLING GREEN STATE UNIVERSITY

Benjamin N. Muego
Bowling Green State University

Bowling Green State University (BGSU) is one of only a handful of *Category I Universities* throughout the United States that requires all candidates for the baccalaureate degree to take at least one three-hour course on cultural diversity in the United States. The cultural diversity requirement was formally instituted by the university in the Fall of 1990 after protracted study, and at times, acrimonious debate. Since then, the University's cultural diversity program has received regional and national acclaim and has often been used as a model by other colleges and universities as these institutions of higher learning began to craft their own cultural diversity programs. A recent survey of 1,300 BGSU undergraduates, 95 per cent of whom were white, suggests that the cultural diversity program enjoys a very high approval rating (82 per cent), and that the study of cultural diversity has been successfully integrated into the academic mainstream.

CAN EDUCATION PREVENT INDIVIDUALS FROM JOINING A GANG OR BECOMING AN ETHNIC FANATIC?

Susanne L. Pastushek

San Bernardino County Probation Department

Do commonalities of ethnic fanaticism and gang affiliation provide a clue to the strong attraction it provides its followers? An examination of gang warfare as a microcosm of ethnic strife; how ethnic intolerance and gang affiliation is taught from generation to generation; the historical justification and the seemingly endless cycle of retaliation; and whether geographic or ethnic origin determines the individual's course of action; and what part the environment plays is considered. Emphasis is given to the role of education in breaking this cycle.

THE DEAF IN AUSTRALIA: DISABLED GROUP OR CULTURAL LINGUISTIC MINORITY?

John F. Paterson
University of Wollongong

Recent trends in special education have taken a more inclusive stance for people with perceived disabilities. In contrast to this move toward integration, the deaf community is taking a more segregationist position where they are again asking for schools for the deaf. They see themselves as a cultural linguistic minority rather than a disabled group and are demanding educational programs that reflect values and aspirations of the deaf community.

While there has been a trend toward decrying any tendency to label people with disabilities, the deaf community prefer to be called "The Deaf." The deaf are, in many ways, proud of their deafness and there can be no doubt that there is a deaf culture (Padden & Humphries, 1988).

The deaf in Australia are a group with a distinct language, Auslan (Australian Sign Language), and culture that places them more correctly in the position of a cultural linguistic minority rather than a disabled group.

Educational programs in the past have concentrated on teaching deaf children standard English which is the language of the dominant community and culture. In a society that values literacy highly, the deaf have been constructed as a disabled and deficient group. Current research shows that the deaf community objects strongly to this deficiency model.

Deaf community views have been sought to provide support for the notion that a bilingual/bicultural approach to education will take into account the minority language status of the deaf and therefore, be more culturally sympathetic.

IMPLEMENTING A MULTICULTURE CURRICULUM FOR YOUNG CHILDREN

Delia Robinson-Richards

Prince George's Community College

It is important that teachers of young children understand themselves, their biases, their perceptions, and their behaviors. After understanding oneself, then the following can be considered: (1) why we are implementing multicultural education, (2) how and why the teacher's role is fundamental, (3) how the teacher can adapt, (4) what keys will make the multicultural curriculum successful, (5) how to implement the multicultural Early Childhood Education curriculum, (6) parents' involvement in the multicultural curriculum, and (7) activities from other countries that children can enjoy doing.

Teachers of young children must understand the importance and value of a multicultural curriculum, as well as the differences and similarities of cultures and what their perceptions are. The development of a positive self-concept and a culturally enriched curriculum are interrelated. A culturally diverse curriculum can be developed and implemented into the existing curriculum by considering characteristics and values of different cultural groups, including food, shelter, clothing, geographic location, holidays, games, and child rearing practices.

CELEBRATING DIVERSITY: ENHANCING MULTICULTURAL APPRECIATION

Dorothy Lee Singleton and Nancy Masztal
University of Southern Mississippi

In order to better prepare preservice teachers to meet the needs of all children in our society, an awareness and an appreciation of diverse cultures is infused throughout the curricula of the methodology courses offered at the University of Southern Mississippi's Gulf Coast campuses. This is accomplished through self-esteem enhancement activities and collaborative projects and by exposing the preservice teachers to literature written by African American, Native American, Mexican American, and Asian American authors. Once literature depicting the values and customs of a variety of cultures has been read, these students discuss, reflect upon, and then write about their various stages of metamorphosis as they broaden their perspectives to include those of others. In addition, guest speakers are invited to speak to the students in regard to gender and cultural issues. These speakers also provide safe forums in which the students may express themselves in regard to their heightened awareness or to some of the unfounded fears and misconceptions that they may still harbor.

Not only are the curricula for the preservice teachers designed to celebrate diversity, but each lesson or unit of study that the preservice teachers implement in the public schools surrounding the university campuses contains a multicultural component designed to foster an appreciation of people of diverse cultures. Some of these lessons are taught in urban-type schools where the preservice teachers learn to work and actually bond with students from cultures other than their own.

The concerted efforts on the part of the university instructors to assist preservice teachers in tearing down cultural barriers and in constructing multicultural bridges over which they and then their students must cross, seem to have stimulated a certain enthusiasm in the learning environment which has fostered more acceptance of diversity and an appreciation of different perspectives. In fact, the excitement being manifested could be equated to a celebration—a celebration of diversity.

TRANSCULTURAL HEALTH: PRINCIPLES AND PRACTICES

Susan C. Slaninke
West Chester University

Transcultural health concepts and principles are fast becoming a sub field of study for health care workers. Individual practitioners must recognize and plan treatment modalities for culturally diverse clients. Transcultural health provides a vehicle to study the effects of cultural values and beliefs on clients' ability and willingness to accept health care.

There are a variety of creative teaching strategies to examine the health beliefs and practices of a variety of subcultural groups in the United States, including the application of multicultural health beliefs to the caring process. Experiential activities that involve students in the teaching learning process include writing assignments, case study analysis, role play, games, and small group activities that are all used to increase students' knowledge and enhance understanding of diversity.

THE NEGOTIATION OF MULTICULTURAL CHANGE IN PRIMARY SCHOOLS

John Stanley
Nene College

This study used mainly ethnographic data to examine the process of multicultural change in the experiences of twenty primary school headteachers and eighteen preservice primary school teachers working in schools in a South Midlands county (United Kingdom). The schools were located in areas of low ethnic minority settlement. The investigation revealed a logic to the development of multicultural education which underlined the significance of participant perspectives and contexts of implementation.

A number of influences were found which appeared to intervene in the change process converting the reform into a form compatible with the existing frames of reference and practices of the practitioners. That process of conversion was seen in three major themes which emerged from the analysis of significant categories. First, participants went through a process of interpreting multicultural change. Individual meanings, continuity, and stability were vital concepts. In the next stage, the teachers exhibited a range of inhibiting responses which the change initiative seemed to draw from them. In this process, practitioners converted the reform into a code consistent with their particular practitioner code. Finally, the generating theme carried some encouraging signs suggesting that understanding and taking account of certain significant features in the cultures and working lives of teachers could assist the implementation of change.

This research attempted to break fresh ground in the debate and research on multicultural education and teachers, and at the same time contribute to the debate about educational change generally. In the investigation, research methods were used which do not usually come together in the way they were used here. The use of the case study approach combined with some action research meant that a different set of tools could be applied to an area which has had numerous toolkits applied to it already. It was thus possible to move away from a statement about multicultural education defined descriptively in terms of content and recommendations to one which looked at these issues contextually.

DEVELOPING INTELLECTUAL POTENTIAL IN AFRICAN AMERICAN CHILDREN

Wilma Vialle
University of Wollongong

Despite current theory and research into intelligence and the acknowledged shortcomings of IQ testing, many practitioners still operate with a deficit model for educating children from differing cultural groups. A naturalistic study of African-American preschoolers living in impoverished circumstances was conducted. Many of these children had already been targeted as *at risk for school failure*. A key assumption of the study was that all children possess a strength in at least one domain of intellectual activity. Gardner's theory of Multiple Intelligences (1983) was used as the framework for observing children's performance in different domains, including: linguistic, logical-mathematical, spatial, musical, bodily-kinesthetic, interpersonal, and intrapersonal. It was determined that the assessment of children's abilities should be made in natural settings as they interact with differing tasks and problems.

It was found that young children exhibited markedly different profiles of strengths and weaknesses across the intellectual domains. Most importantly, the research indicated that it was possible to teach children to overcome weaknesses in one domain by focusing on their strengths in other domains. For example, one child was described by his day-care provider as emotionally disturbed, nonverbal, and lacking in concentration. The researcher found that he had high spatial intelligence. By nurturing this strength and providing positive feedback, the child's verbal skills developed and his emotional outbursts almost disappeared. Another child was taught to read and write the alphabet by capitalising on her musical and bodily-kinesthetic intelligences.

The implications for education are manifold. By identifying and valuing each child's individual strengths, it is possible to enhance her or his achievements in other domains. This approach is particularly vital for children from different cultural groups whose strengths frequently do not lie in the traditional linguistic and logical-mathematical domains that are easily recognised by school systems.

FRESHMAN ENGLISH FOR NATIVE AMERICANS IN A MULTICULTURAL UNIVERSITY: THE FIRST SEMESTER

Jefferson Voorhees
University of New Mexico

The English Department of the University of New Mexico, responding to statistics suggesting that many of its Native American students experience unique difficulties in freshman composition classes, this year offered its first sections of English 101 and 102 designed specifically for Native Americans. Background conditions leading to this experimental offering and a variety of issues involved in its implementation included: the nature of problems confronting Native Americans in the university, the particular circumstances of New Mexico, the selection of reading materials relevant to New Mexico's Navajo and Pueblo students, administrative and political difficulties, peculiarities of the Native American college classroom, modified pedagogical approaches, the mixed results of the experiment, and the experiment's implications for a modern, multicultural institution. Results are generated from personal experience as a classroom teacher, analysis of student writing, interviews with students, and an end-of-semester questionnaire.

TECHNOLOGY: CONTRASTS AND COMPLEXITIES SMALL PRIVATE UNIVERSITIES AND LARGE COMPREHENSIVE PUBLIC UNIVERSITIES

Jacquelyn Alexander and James Yates
Our Lady of the Lake University, San Antonio

Institutions of higher education are stretched to provide adequate quantity and up-to-date quality technology to students and faculty. The small private university and large public university express these issues somewhat differently, expressing different dimensions of the problem and effecting different solutions.

While colleges of education within the large research university and the small private university both find it financially challenging to afford technology, their approaches to solving this problem are quite different. In one large research university, the College of Education proposed to integrate computing and telecommunication technologies into teaching, research, and service functions. The latest technologies will be incorporated into all phases of student preparation programs. Such integration is necessary for faculty and students to conduct high quality research and remain intellectually and professionally competitive.

To pay for these activities, the university instituted a six dollar per credit hour student fee for technology development. Since a large research university generates a significant number of credit hours; it is expected that these fees will allow the college to implement its ambitious technology plan over the next five years.

Factors identified as facilitating by the small university (i.e., access to decision makers, institutional ability to respond quickly and cooperative atmospheres) are likely to be considered constraining factors at the large university. The reverse is often also true. While needs remain similar, solutions to the problems presented by these needs remain quite distinct between the small private university and the large major research university.

THE IMPORTANCE OF EDUCATING PRESERVICE TEACHERS IN THE USES OF TECHNOLOGY FOR THE GLOBAL CLASSROOM

Kathie Black
University of Victoria

... computers can be expected to deepen the entire culture's view of causality, heightening our understanding of the interrelatedness of things, and helping us to synthesize meaningful wholes out of the disconnected data whirling around us (Toffler, 1980).

As society moves into a new age, the importance of utilizing the tools of technology in education become greater. Technological achievements have allowed our understanding and knowledge of nature's systems to change more quickly with greater intensity and complexity (Toffler, 1990). Basic rules govern our understanding. A door must first be opened before one can walk through it. The engine of a car must first be started before that car can run. Water must be cooled to a temperature below freezing before ice can be made. Technology must first be understood and available before it will be utilized in our schools.

Knowledge of strategic use of technological tools will enter the arena of global education through preservice teacher education programs. Evidence demonstrates that inservice teachers will not change their personal teaching styles after three to five years of practice. Rapid changes in technology quickly outdate inservice teachers' practical use of technology as a teaching strategy. Understanding and a foundation of teaching strategies utilizing technology begins with preservice teachers as they explore sound pedagogical practices. Once this basic foundation has been established, updating of skills will ensure continued practice.

The potential of technology to radically transform how teaching and learning occurs in schools exists on a global scale. Preservice teacher preparation programs serve an important role in implementing technology in future schools and the universities' role in providing current resources in preservice teacher education programs is critical.

TECHNOLOGY SUPPORTED TEACHER EDUCATION: IMPLEMENTING A GLOBAL VISION

Kathleen L. Daly

University of Wisconsin, River Falls

A shared vision exists for teacher education that focuses on quality, visionary leadership, collaborations, diversity, community, intellectual growth and the total well-being of the individual. The goal is to prepare ethical, reflective practitioners who are empowered to provide visionary leadership to the profession. Program characteristics include collaborative field-based experiences, a campus-wide commitment to teacher education, instructional technologies and intensive regional, national, and international telecommunications supported collaborations.

Technology Supported Projects. Ways in which technology is used to support activities that move toward this vision of a telecommunications supported, global teacher education program include:

Telecommunications Project. Twenty-five K-12 teachers from our area and their classrooms are linked with teachers and students in Russia. Using electronic mail through an 800 number at the university, the participating U. S. classrooms have jointly completed projects with their matched classrooms in Russia that have included collaborative newsletter writing assignments, cooperatively written creative stories, language exchange, comparative physics experiments, general science projects, children's opera using folk tales, and social studies activities.

Curriculum Development Project. Funded by Ameritech, the focus of this project is to develop curriculum materials that will empower K-12 teachers to implement telecommunications supported, project-based learning to enhance higher level thinking skills. A coordinated teacher preparation curriculum has been developed that will teach preservice and inservice teachers to implement telecommunications projects using the K-12 curriculum. A technology support center is also being established on the River Falls campus to support teachers using the curriculum. The project team is composed of K-12 teachers and university faculty working with colleagues worldwide in telecommunications projects.

Kaliningrad Collaboration. An exchange project with Kaliningrad, Russia that increasingly relies on technology has resulted in widespread regional support because of exciting outcomes such as the following:

Three visits to Russia by a total of 71 River Falls area professors, K-12 teachers, and K-12 students, including a behind-the-scenes look at the technology of the Space Centre in Kaliningrad.

Three visits to our region by a total of 109 Russian business and civic leaders, K-12 administrators, teachers, and students.

Meetings of Wisconsin and Minnesota businesses with Russian business and civic leaders focusing on computer technology.

An exchange of over 100 educational computer programs.

VIRTUAL CLAYOQUOT: A MULTIMEDIA EXPLORATION

Leslee Francis-Pelton, Ted Riecken,
Ricki Goldman-Segall, and Pierce Farragher
University of Victoria

Virtual Clayoquot is the name given to a science and social studies project undertaken by students at Bayside Middle School on Vancouver Island. Students investigated issues pertaining to the controversy over the future of one of the last Pacific Northwest old growth rain forests, located in the Clayoquot Sound region on the west coast of Vancouver Island. Taking on the role of researchers, students and their teachers investigated the issues surrounding the dispute from a variety of perspectives such as forestry issues, environmental issues, economic issues, employment needs, First Nations peoples' claims, trade agreements, government priorities, and global concerns. Print data collected included articles from newspapers, magazines, scientific journals, and published statements from various interest groups. Students also conducted interviews with members of various interest groups (e.g., loggers, protesters, community members, and government officials), and visited an area of active forestry to form their own impressions of the forest and put in perspective the issues they had investigated.

Students synthesized the information they collected in various ways: posters, reports, and computer-based concept maps. Issues were also discussed and opinions shared via electronic mail with students from another middle school. Data collected by students, teachers and researchers, as well as work done by the students is being collected and entered into computers to form a large multimedia database. This data will be made available on CD-ROM.

As students investigated the Clayoquot Sound issues, researchers investigated the students, looking at the thinking styles used by these young people and their various approaches to collecting and analyzing their data. In particular, the interest was in how students make sense of complex social and scientific issues and in finding ways to enable students to become informed decision makers about these.

DUNGEONS AND DRAGONS AS A PARADIGM FOR HELPING TO PROMOTE INTERNATIONAL AWARENESS AND UNDERSTANDING IN EDUCATION

Samuel W. Spero
Cuyahoga Community College

"Do not judge your fellow man, until you are in his place." (*Ethics of the Fathers*)

The best way to involve students in a multicultural experience is to immerse them in that experience. Computer-based, role playing simulation games provide the framework to accomplish this even in the traditional classroom.

Role playing simulation games make the elements of the curriculum concrete by turning abstract concepts into concrete instruments which can be used, if for nothing else, to *win* the game. Using a role playing simulation game to study the Holocaust, for example, offers an outstanding opportunity to allow students to enter the *place* of the Jews in Europe during World War II. Within that framework the players can experience Europe of the thirties and forties in a way that no lecture or film can duplicate. Once in the game, however, there are ample opportunities to discuss and watch what took place during those difficult years.

In a role playing simulation game, a student *chooses and plays a role* which helps him articulate his relationship to the *simulation*. The idea of a game need not imply something silly or trivial, as is demonstrated in the game *Freedom*. The idea of a game is to provide a direction for the simulation. The direction for the simulation of the Holocaust is to simply survive.

The purpose of a role playing simulation game is not simply to increase motivation. In a role playing simulation game there is true personal involvement, and when the student is personally involved, he or she tries different approaches and learns from them; the student interacts with other students and the teacher; and relates the game to other aspects of his or her life.

The feasibility of this is demonstrated in games that are already *out there*.

1. *Race Into Space*, a turn-based simulation of the Russian-American space race;
2. *Freedom*, a role playing game simulating the life of the slave in mid-19th Century United States attempting to escape to freedom;
3. *Polsys*, a political science simulation quantifying role playing and decision making, which was developed in the early 1970s for use in high schools;
4. *Dungeons and Dragons*, the *classic* model of quantifying role playing and adventuring.

ENVIRONMENTAL PHYSICS: A CONCEPTUAL APPROACH TO THE STUDY OF SCIENCE

Thomas B. Cobb
Bowling Green State University

Environmental problems have received considerable attention by the media in recent years. As a consequence, public awareness of such issues has been heightened worldwide because of common problems which transcend political and geographic boundaries. At the same time, most surveys indicate that public understanding of basic science principles and the ability of students to employ analytical reasoning and quantitative assessment to such problems seem to have diminished, especially in the United States. A means of addressing this problem by using the present heightened interest in environmental topics is to motivate students to conduct a more indepth study of the underlying science. This method was employed in a class of 40 junior and senior college students with mixed science backgrounds but with strong environmental interests. Environmental topics such as global warming, ozone depletion, acid rain, electromagnetic field effects, nuclear radiation, waste disposal, and solar energy were used to provide the stimulus for studying the underlying scientific topics such as: greenhouse effect, blackbody radiation, atmospheric chemistry, thermodynamics, and atomic and nuclear physics. Computer exercises, classroom demonstrations, laboratory experiments, and field trips were used to enhance learning. Student response was positive based on course evaluations, but pre- and post-classroom testing indicated that substantive material comprehension was only marginally improved — at least in the short run. On the other hand, the technique seems to provide increased personal motivation and confidence in individual students—especially those who are not following a science or technological course of study. Moreover, this approach creates an option for students following environmentally related fields to take a science class which focuses on topics of personal interest. The course will be repeated this summer under a shortened workshop format for a group of high school science teachers, with a view toward extending the concept to the secondary school level.

CREATING COLLABORATIVE COALITIONS TO MEET THE CHALLENGE OF DIVERSE URBAN CLASSROOMS

Donna Evans and Cheryl Fountain
University of North Florida

A replicable, collaborative change model was created by a university/school district/teacher organization/state department of education coalition. This collaborative change model was used to implement an inter-institutional learning community grounded in the habits and skills of collaboration, capable of transforming independent goals into mutually beneficial actions targeting issues facing urban schools. Florida Blueprint 2000, the state's response to restructuring the schools to meet Florida's educational and economic needs of the 21st Century, guided project goals and activities.

Florida's First Coast Urban Academy for Excellence in Teaching responds to the need to prepare teachers who are capable of and committed to creating high performance learning environments for urban students while attending to the need to prepare urban students who acquire and use knowledge to solve complex problems creatively and ethically, readily adapt to changing circumstances, and excel in a culturally diverse and technologically sophisticated world. To address student needs, four Academy Student Learner Outcome Themes were identified: Cooperative Citizen, Process-Oriented Learner, Technologically Competent Learner, and Culturally Sensitive Learner. Two additional Academy themes focus systemic change efforts: Change Agency and Team Building. Intensive summer training coupled with year long follow-up and multifaceted support activities are salient features of the Academy.

Over one hundred school-based urban educators participated in the 1993-94 academy. Participants viewed the experience as one of the most positive in their professional careers. Using a ten-point Likert scale, average ratings for items ranged from 9.28 to 9.77. School-based and university faculties shifted their belief systems from urban children as at-risk victims to urban children as resilient learners. As a result, changes in their practice were observed during the year. The academy change model has created a *safe* environment in which both university and school-based faculties are free to collaboratively experiment and learn together.

THE LIFE CYCLE OF A DISCIPLINE INTERVENTION IN INNER-CITY ELEMENTARY SCHOOLS

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University of Houston and National Center on Education in the Inner Cities

A cohort of students from five inner-city elementary schools who had teachers trained in a discipline management program called Consistency Management and were continuously enrolled for six years (1985-86 through 1990-91) were compared with students from five comparison schools who did not have teachers trained in the program. Five comparison schools had been matched to the program schools within the same district prior to the intervention. The overall multivariate effect due to program treatment was quite large, with 41 percent of the variance across the five years of MAT-6 achievement and 31 percent of the variance across the five years of the state TEAMS test associated with the program intervention.

Differences were observed in teacher behaviors including program teachers spending more time in language arts ($p < .01$) than reading, communicating the task's criteria for success ($p < .01$), and encouraging self-management ($p < .05$) and students to succeed ($p < .05$). The comparison teachers encouraged extended student responses ($p < .05$), focused on the task's content ($p < .001$), and focused more on reading ($p < .05$) than language arts. Based on student observations, students in the program schools had more interaction with their teachers ($p < .001$), less independent seat work ($p < .001$), more interaction with other students ($p < .001$), spent less time doing teacher assigned activities ($p < .001$), and more time in student selected learning activities ($p < .001$). Students in program schools talked more ($p < .001$) and spent more time getting and returning materials ($p < .01$). Students in comparison schools were presenting/acting more ($p < .01$), reading more ($p < .01$), and coloring and drawing more ($p < .01$) than students observed in the program schools. The program schools had half the number of suspensions (83 vs. 165) for the 1991-1992 school year with a total effect size difference of .56. The findings provide insight into factors which foster resilience in inner-city youth and the half-life factors which act as barriers to improving schools.

ATTITUDES AND VALUES IN FORMAL ENVIRONMENTAL EDUCATION: THE CASE OF QUÉBEC

France Jutras
Université de Sherbrooke

The process of education is slow and aims for long term goals. Nevertheless, in its formal and nonformal contexts, education has a role to play in the forming of attitudes and the acquisition of values. This is strongly the case with environmental education (EE). Its main concern does not lie in creating an awareness of environmental issues, it rather lies in questioning values and altering attitudes in order to influence behavior and action in the quest for sustainable development (Bruntland Report).

Even though educational systems have a long way to go before they meet with the specific goals of EE and its educational philosophy, it is important to question and verify the place of EE within the present organisations and curricula. As other educational systems in the world, the educational system of the province of Québec (Canada) is challenged with the responsibility of doing its share in EE. This involves two complementary approaches. The first is the curriculum which includes formal EE from kindergarten to the university level. The second includes the educational projects created and adopted by each institution. Therefore, in Québec, there is a coexistence of scientific, conservationist, humanistic, and environmentalist trends. The present analysis enhances the specific goals, attitudes, and values of each trend. But a question still remains: Should environmental education be dealt with through emotions, reason or both?

Attitudes and values can be discovered and experienced as much through scientific investigation as through social sciences, the humanities, and the arts. After all, people should possess skills and tools to make informed, environmentally sensitive decisions.

INCLUSION OF SPECIAL EDUCATION STUDENTS: IMPACT ON SCHOOL FACILITIES

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University of Montana

Ed Lilley

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University of Montana

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Walt Spotowski Architecture

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Edmonton Catholic Schools

The first challenge in understanding inclusion is term definition. Inclusion is the integration of students with disabilities into regular classrooms within the school setting. In Canada, the term *integration* is used rather than *inclusion*.

School boards must address changes in both curriculum concepts and physical classroom space that must occur in order to (1) eliminate the isolation of disabled students and (2) meet the intent of the law. Legal interpretations of inclusion continue to emanate from our court systems.

The impact of inclusion on students and teachers has yet to be determined since there is little firm data to support any one viewpoint in terms of student achievement and/or teaching effectiveness. The financial costs of implementing inclusion vary depending upon the willingness of the school boards to meet inclusion requirements and the staff development required to enable teachers to meet the needs of disabled students in the classroom.

Finally, design concepts and limitations are issues in both new designs and retrofitting. This issue extends beyond school boards to include updating the knowledge base of architects and contractors regarding special education programs, students, and law. Inclusion requires school systems to not only understand, but to implement the concept of barrier-free schools for all students.

THE TEACHER RESEARCHER: FROM PROMISE TO POWER

Jane McGraw

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How do teachers become researchers? How do they begin the inquiry? What about rigor in teacher research? How valid is teacher research?

Teachers are researchers. During the past decade, the phrase, *teacher as researcher*, has gained in prominence throughout education. As teacher research flourishes, it is being hailed as a revolutionary idea with great promise for staff development, teacher empowerment, and the linking of theory with practice. Teacher research is a unique genre of research. It seeks to understand the particular individuals, actions, policies, and events of the classroom environment. It requires the teacher to engage in reflection and inquiry in order to make professional decisions about student learning. Action based on the new knowledge developed through reflection and inquiry is the ultimate goal of teacher researchers. In teacher research, teachers act as thinkers, learners, and practitioners in uncovering and challenging assumptions and beliefs about teaching, learners, and school practices. Diversity is a powerful characteristic of teacher research, also known as action research. All researching teachers share a common process of reflecting upon their practice, inquiring about it, and taking action. Teacher research attributes power to teachers in their ability to transform their world.

Teacher research is a sign of professionalism in literacy education, math, and science education, in the subject matter content areas in general, and in professional development of teachers specifically. Teacher researchers believe in the power of critical reflection to change classrooms, campuses, and communities. Teacher researchers lead courageous professional lives. They have contributed positively to building theories about teaching, learning, curriculum, and assessment. Their stories deserve to be heard. They tell their stories so powerfully. Teacher researchers can change the lives of learners at all grade levels.

ALL EDUCATORS LEARNING: THE POTENTIAL OF CONTEXTUAL SUPERVISION

Edwin G. Ralph
University of Saskatchewan

As educators worldwide contemplate their crucial role of helping prepare global citizens for the new Millennium, they experience mixed feelings of hope and apprehension. The task of promoting the achievement of a balance of unity and diversity within and among societies and nations is indeed daunting. However, one of the key premises upon which successful individual development within organizational contexts rests—whether in education, government, business, industry, or labor—is that the process of learning is continuous. Humans are lifelong learners who, at any point in time, are each at various stages and levels in a range of particular knowledge and skills.

Although many educational reform initiatives have not yielded promised results, several key principles of effective individual and organizational change have been repeatedly identified in organizational and educational research. Four major sources of this research include cognitive developmental psychology, andragogy (education of adults), transformational leadership, and educational change.

One leadership model, Contextual Supervision (CS), has been used in a Western Canadian context to enhance the supervisory process in teacher education, while at the same time conforming to the principles of successful professional development referred to in the four areas above.

Based on this period of action-research—in which CS was used with experienced and beginning educators in a variety of educational contexts, cultural/language environments, and social/community situations—several implications are drawn for the implementation of CS by *anyone* filling a supervisory role at *all* levels and in *all* contexts of organizational life. CS is shown to be useful in: (a) conceptualizing supervision, (b) guiding supervisory practice, and (c) facilitating the actual exchange of supervisor/supervisee or teacher/learner roles.

SPACESHIP EARTH: THE USE OF METAPHORS TO EXPLORE GLOBAL ISSUES

Gloria Snively
University of Victoria

A frequent method of teaching ecology and resource management is to explain the concepts of interest, conduct laboratory experiments, and test the students' ability to match meanings with the standard, adult, scientific interpretation of the concepts found in the answer key. Typically, teachers rarely ask students to produce or interact with language beyond a rote memorization phase. All too often students are spectators, and not active participants in the learning process. It is no wonder that many students appear to lack the reasoning power, or interest, to cope with complex ecological processes, or to work toward solving environmental problems of global proportions.

The word metaphor comes from a Greek word that means *to transfer*. A metaphor transfers meaning; it bridges, extends, and twists the meaning of words so that they apply to other objects, phenomena, or situations than those to which they originally applied. Metaphor includes anything that transfers and translates the abstract into the concrete, thus making the abstract more accessible and memorable (Best, 1985).

Teachers can use both language metaphors (The earth is a "garbage dump," "spaceship," "global village," "mother," "living organism") and metaphorical artwork (cartoons, sculptures, paintings, posters, logos) as effective teaching devices. Through metaphorical imagery, students can conceptualize, dialogue about values and quality of life issues, begin to understand complex global issues, and effectively generate and test possibilities for change and repair. Through metaphor, students can dream about what the world could be like.

A COMPARISON OF EDUCATION OF PRINCIPALS IN THE PHILIPPINES WITH CALIFORNIA

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As a result of the emphasis on reform of the education and training of school administrators in California and the awareness of the need for graduates of America's public schools to compete in a world market, a study was completed of the training, competencies, and skills required for successful leadership by school principals in the Philippines as compared to similar preparation in California. Interest in this study was stimulated by the increasing number of Filipinos living in California and an involvement in an accreditation visit to two schools in the Philippines.

An examination of how Filipino principals are trained has the potential to provide lessons useful to our reform efforts. For example, the literacy rate in the Philippines is much higher than California and at considerably less expenditure per pupil for public education. Interest was also in the ongoing debate regarding the balance of theory and practice in the training of future leaders. In the Philippines, principals traditionally begin their administrative training with practical experience under the guidance of a local school director prior to the more formal study of theory, the opposite of what is the usual practice in California.

A study was completed in 1993 of critical skills required of the California principal. Six hundred California superintendents and principals responded to a survey, which identified the ten most critical skills for successful leadership by school principals.

A similar study of principals was conducted in the Philippines. Two hundred principals from the Philippines responded to the survey regarding the education and preparation required of principals in that country. They were also asked to indicate the most critical skills for successful leadership by a principal in the Philippines. The results of the study have been compiled and analyzed.

BASIC ECONOMICS TESTS IN JAPAN: THE RESULTS IN HIGH SCHOOLS AND THE COMPARISON WITH UNIVERSITY STUDENTS

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The Japan Research Council on Economic Education (JRCEE) completed Basic Economics Tests between November 1989 and January 1990 (first test) and between November 1992 and February 1993 (second test). The primary objective of the tests were to find out how well senior high school students in Japan understand the *economy* and to obtain reference data for use in developing and carrying out a reform of economic education in Japan.

1. *Numbers of schools and students who participated in the tests:* In the first test, 47 senior high schools in various parts of Japan participated in the first test and 51 schools in the second test. A total of 6565 students between 16 and 18 years old took the first test and 9062 students took the second test.

2. *Results of the tests:* The two test questionnaires consisted of 40 questions. Some questions of the second test were improved because of the experiences of the first test. Questions were also added to the second test concerning the Japanese economy.

Although it is difficult to get any meaningful information from results of the two tests which were simply compared, the average score for correct answers on the first test was 61.8 percent and 55.0 percent on the second test.

3. *Analysis of the two tests:* Analyzing the results of the two tests, the following conclusions were made: (1) students in Japan often do not accurately understand basic economic concepts (scarcity and opportunity cost), (2) students in Japan are apt to answer not by theoretical judgment but by their own experience, and (3) as a result of the above mentioned, the correct answers to the theoretical questions for checking students' ability to apply their basic economic knowledge decreased sharply.

4. *Comparison of results between senior high school students and university students in the second test.* The results of the tests of senior high school students are compared with the results of university students who completed the test using the same questionnaire.