

## ERIC Digest 101 January 1995

# Integrative Education

*By Dean Walker*

A growing number of education reformers are justifying their reform strategies by pointing to the findings of research on the learning process. They are basing their theory and practice of education on developmental brain research, theories of information processing, and the needs dictated by today's information-rich world. These reformers contend that teaching facts and skills in a school day artificially compartmentalized into subject disciplines fails to prepare students for a swiftly changing world. Through integrative education, these educators seek to improve students' basic skills in language arts and mathematics while also teaching thinking skills, physical and sensing skills, and social skills (Betty Jean Eklund Shoemaker 1989).

### What Is Integrative Education?

A single definition of *integrative education* is elusive. Shoemaker brings together several themes to create an eclectic definition. Integrative education, she writes, "cuts across subject-matter lines, bringing together various aspects of the curriculum into meaningful association to focus upon broad areas of study." It reflects the interdependent real world, and involves the learner's body, thoughts, feelings, senses, and intuition in learning experiences that unify knowledge and "provide a greater understanding than that which could be obtained by examining the parts separately."

Integrative education bases its practices on the characteristics of the human learner and on the interdependent nature of reality. Instead of artificially dividing the world into "subjects" and using textbooks and seat work, integrative education immerses students in an enriched environment that reflects the complexities of life. This provides a holistic context for learning that leads to a greater ability to make and remember connections, and to solve problems (Susan Kovalik and Karen Olsen 1994).

### Is Integrative Education New?

As early as 1918, Kilpatrick elaborated a "project method," in which education proceeded from the interests of students rather than from disciplined subject matter. In the 1930s, thirty schools participated in a long-term experiment with integrative education called the "Eight-Year Study." Although this study documented the benefits of integrative education, the study had little impact on the traditional structure of education (Daniel L. Kain 1993). In spite of its shortcomings, the practice of breaking down instruction into separate academic disciplines has seldom been challenged.

While integrative education is not new, current supporters offer proof of its wisdom by pointing to recent research that indicates information is most securely encoded and best retrieved by the brain when it can be connected to a web of meaning. Jane Roland Martin (1995) argues that integrative education allows curricula to educate through the experiences of diverse races, genders, and classes, thus creating a place of significance for each child.

## **Is Integrative Education More Effective Than Traditional Education?**

In the "Eight-Year Study" conducted during the 1930s, students who received the "fused" curricular design displayed more intellectual curiosity, a better attitude toward learning, and higher achievement in college than students in a traditional college-prep program (Kain). A recent study of 15,000 eighth graders shows that students from schools using an interdisciplinary approach scored higher on standardized tests than peers enrolled in single-discipline subjects (Ed Lawton 1994).

Kain notes that findings on the effectiveness of integrative education are inconclusive. He suggests in many instances findings are biased by the values that drive the traditional subject-discipline curriculum. These values are inherent in the standardized measures of assessment that researchers have used to examine the impact of integrative education. Kain believes that the true impact of integrative education studies will only be ascertained when the entire experience of students and teachers who participate in integrative education is examined.

## **How Is Integrative Education Implemented?**

Some school districts mandate across-the-board implementation of an integrated curriculum, while others allow individual schools, teams of teachers within a school, or even single teachers to choose to work toward integration.

The advantage of the district mandate is that staff can rely on each other for support and resources, and fragmentation into cliques of "traditionalists" and "integrationists" is avoided. The advantage of the piecemeal approach is that teachers who choose to integrate will focus their energy on success rather than sabotage. When the seeds planted by these pioneers are nurtured by administrators, integrative education can grow organically to encompass the system (Jane Braunger and Sylvia Hart-Landsberg 1994).

David Elkind (1994) notes that elementary teachers have the advantage of being trained in cross-disciplinary education. They do not need cross-certifications in subject matter, and are unlikely to perceive integration as a threat to their professional identity. With its emphasis on developmentally appropriate practices, early-childhood education can serve as a model for the implementation of integrative education throughout the primary school years.

Ann Ross and Karen Olsen (1993) discuss five models of implementation for middle schools and high schools, each providing a foundation for the next.

First, there is "single subject integration," which presents the content of one curriculum subject as it appears in real life, and requires students to apply skills within this meaningful context.

Second, in the "coordinated model," two or more teachers teach integrated single subjects to the same students separately but cooperatively, to ensure that the desired skills and content are taught.

Third, in the "integrated core model," one teacher remains with students for two or three periods. For example, a teacher might teach language arts in the context of science or social studies as the "core" around which the rest of the school day is planned.

Fourth, in the "integrated double core model," two teachers instruct the same students within two integrated cores. For example, one might teach math skills in the context of science, while another teaches language skills within a social-studies context.

Finally, in the "self-contained core model," one teacher with multiple-subject credentials remains with one group of students all day, teaching all skills and content within one or two meaningful contexts.

### **How Can Administrators Support Integrative Education?**

Principals can introduce the concepts of integrative education at staff meetings and allocate funds to training. Release time can be arranged for staff to visit successful integrated programs (Braunger and Hart-Landsberg).

When one or two teachers set out to integrate the curriculum, they need significant input into decisions about appropriate materials and student schedules. For example, they may wish to trade journals for textbooks, project materials for worksheets, or field trips for lectures. As more teachers become involved, especially at the middle and high school levels, schedules must be arranged to allow common prep time for teams of teachers who have previously taught their subject matter in isolation. Team teaching facilitates integrative education even in primary schools, but is indispensable at higher levels, where teachers are trained as subject specialists (Kovalik and Olsen).

Student schedules are rarely a problem when integrating education in the elementary school, but special administrative measures must be taken at middle and high school levels to ensure that teachers from different subject areas who wish to teach integrated units based on a common project or theme are scheduled with the same students in different blocks of time. When only some teachers are integrating their curriculum and team teaching, the students in the integrated section should be scheduled first, before releasing the remaining students to complete a traditional registration (Ross and Olsen).

Principals can give students exposure to professionals and business people by encouraging site-based councils, school-business partnerships, and other social programs. Appropriate technology--phones, electronic mail, and fax machines--should be available, not only for teaching, but for extending the

teacher's ability to interact with partners in integrative education (Braunger and Hart-Landsberg).

An integrative education emphasizes the interdependence of knowledge and processes. Educators who wish to implement an integrated curriculum must reflect its values by recognizing and benefiting from their own interconnection.

## Resources

Braunger, Jane, and Sylvia Hart-Landsberg. *Crossing Boundaries: Explorations in Integrative Curriculum*. Portland, Oregon: Northwest Regional Educational Laboratory, 1994. 58 pages. [ED370 239](#).

Elkind, David. "Early Childhood Education and the Postmodern World." *Principal* 73, 5 (May 1994): 6-7. [EJ483 341](#).

Kain, Daniel L. "Cabbages--and Kings: Research Directions in Integrated/Interdisciplinary Curriculum." *The Journal of Educational Thought* 27, 3 (December 1993): 312-31. [EJ476 405](#).

Kovalik, Susan, and Karen Olsen. *ITI: The Model. Integrated Thematic Instruction*. Third Edition. Kent, Washington: Books for Educators, Covington Square, 1994. 374 pages. [ED374 894](#).

Lawton, Ed. "Integrating Curriculum: A Slow but Positive Process." *Schools in the Middle* 4, 2 (November 1994): 27-30. [EJ492 890](#).

Martin, Jane Roland. "A Philosophy of Education for the Year 2000." *Phi Delta Kappan* 76, 5 (January 1995): 355-59. [EJ494 703](#).

Ross, Ann, and Karen Olsen. *The Way We Were...The Way We CAN Be: A Vision for the Middle School through Integrated Thematic Instruction*. Second Edition. Kent, Washington: Books for Educators, Covington Square, 1993. 239 pages. [ED371 906](#).

Shoemaker, Betty Jean Eklund. *Integrative Education. A Curriculum for the Twenty-First Century*. OSSC Bulletin Series. Eugene, Oregon: Oregon School Study Council, 1989. 46 pages.

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