

These variations dramatically illustrate the considerable autonomy exercised by elementary school classroom teachers. They also show little agreement among the observed teachers on what to emphasize.

For more information, send for IRT Research Series No. 66, *How Do Teachers Spend Their Language Arts Time?* by L. Roehler and others, \$2.75. Ordering information follows.

■ WHAT ARE IMPROVING SCHOOLS LIKE?

Are changes in pupil achievement profiles related to changes in schools? Wilbur Brookover and Lawrence Lezotte looked at schools in which student achievement was declining or improving to answer that question and came up with ten major findings.

1. The staff of the improving schools stressed the importance of basic reading and mathematics objectives far more than did the staff of the declining schools.

2. The staff of the improving schools believed that *all* of their students could master the basic objectives. Staff in the declining schools thought their students incapable of mastering the basic objectives.

3. Staff of the improving schools were more likely to believe their students would complete high school or college.

4. Staff of the improving schools were more likely to assume responsibility for teaching basic reading and math skills and were more committed to doing so. Staff of the declining schools tended to place this responsibility on parents or students.

5. Teachers in the improving schools spent more time in direct reading instruction.

6. In the improving schools, the principal was more likely to be an instructional leader, be more assertive in his/her instructional leadership role, be more of a disciplinarian, and assume responsibility for evaluation of student achievement of basic objectives. Principals in the declining schools were more permissive, emphasized informal, collegial relationships with teachers, and put more emphasis on public relations than on school effectiveness.

7. The staff of improving schools were more willing to hold themselves accountable for student learning. They were, for example, willing to view standardized test scores as a measure of their effectiveness.

8. Generally, teachers in the improving schools were less satisfied than teachers in the declining schools, who seemed more complacent.

9. While there were no clear-cut differences in parent involvement, the improving schools reported more parent-initiated involvement than the declining schools.

10. The improving schools generally emphasized neither paraprofessional staff nor compensatory education; declining schools made more use of these services and reported more emphasis on programmed instruction.

For further details, send for IRT Occasional Paper No. 17, *Changes in School Characteristics Coincident with Changes in Student Achievement*, by W.B. Brookover and L.W. Lezotte, (\$5; executive summary, \$1).

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Learning Styles

RITA DUNN AND
NANCY RECKINGER

■ PERSONALITY STYLE/ CLASSROOM CONDITIONS IMPORTANT

Learning behavior depends on a student's personality style and his or her classroom environment and they need to be viewed as mutually dependent.

This is the underlying assumption of a new book by Keith Goley called, *Temperament Styles and Learning Patterns: A Systematic Guide to Maximizing Student Learning*. He has also devised the *Learning Pattern Assessment*, an instrument for identifying a student's learning pattern.

Goley takes the position that a student is not a random collection of character traits such as aggressiveness, modesty, ambition, shyness, or cooperativeness, with each taking an inde-

pendent course. Nor does a student act in empty space, but in an environment that has a daily rhythm of its own. It follows then that we must identify a student's *pattern* of learning and determine the conditions of the classroom environment that interact most productively with that pattern.

Goley applies Keirseian Temperament Theory of personality to understanding the differences in learning behavior. He identifies four basic learning patterns: the Actual-Spontaneous, the Actual-Routine, the Conceptual-Specific, and the Conceptual-Global.

A coherent and comprehensive portrait is given for each of the patterns, specifying the most effective instructional methods for each pattern, the curriculum content each type prefers, and the most effective way to present specific subjects to each type of learner. Goley describes how to create a classroom atmosphere that will maximize each learner's receptivity, cooperation, and enthusiasm for learning. He also discusses how to use classroom space to accommodate each learning pattern, and the variety of methods and materials needed for inspiring each student's finest learning achievement.

For additional information contact Keith Goley, Department of Counseling, School of Human Development and Community Service, California State University, Fullerton, CA 92634.

■ TEACHING BOTH SIDES OF BRAIN STRESSED

Learning Style theory can lead us astray if we focus totally on separate parts. A Holistic Education Network has, therefore, been organized by California educators who want to see schools balance their heavy left-brain orientation with more right-brain activities to achieve whole-brain learning.

In lieu of a conference this year, the Network sponsored monthly sessions by prominent specialists including founder Anastas Harris' overview of the idea of holistic education, Maureen Murdock on multisensory approaches to whole-brain learning, George Brown on confluent education, Carol Austin on the art teacher as nurturer of the emerging scientist, Beverly Galyean on the brain and holistic teaching methods, Sondra Borenstein on holistic approaches to the basic skills, Marilyn Ferguson who wrote *The Brain Revolution and the Aquarian Conspiracy* on transforming traditional education, and Jack Canfield on the inner classroom.

On May 9 at the campus of California State University, Long Beach, Mary Meeker will offer techniques for measuring whole brain learning. Meeker says "Very few people know that their behavior is derived from their own personal cognitive strengths and weaknesses and thus teachers can best understand their students not from their emotional and social functions but from their cognitive abilities."

The Lozanov approach to accelerated, nonstressful learning will be presented on June 13. This method deals with the orchestration of the entire personality and the environment for the purpose of tapping the reserve capacities of the mind through relaxation, classical music, and suggestion, according to Stephanie Merritt who will make the presentation.

For information about the conference sessions or the Holistic Education Network contact Patricia Jersin, Department of Teacher Education, California State University, 1250 Bellflower Blvd., Long Beach, CA 90840.

■ ARE SCHOOLS "BRAIN ANTAGONISTIC"?

Two powerful articles explain new understandings of the brain and provide fresh insights into human nature. According to Leslie Hart, conventional classrooms may actually be "brain antagonistic" while tactual/kinesthetic, experiential instruction may produce faster, easier learning for young children.

References: Leslie A. Hart, "Classrooms Are Killing Learning," *Principal* 60, 5 (May 1981): 31-34; and "The Three-Brain Concept and the Classroom," *Phi Delta Kappan* (March 1981): 504-506.

■ COUNSELING DIFFERENT LEARNING STYLES

Just as teachers develop "pet" instructional techniques that seem to "work" for them, counselors often rely heavily on strategies with which they have had success. However, the mounting research that shows that matching learning and teaching styles improves academic achievement and attitudes toward school has also caused counselors to consider matching learning styles and counseling interventions.

For example, recent studies suggest that:

—Group counseling strategies are ineffective for some self- or adult-oriented youngsters

—Even at the high school level, many students are not mature enough to respond to predominantly verbal approaches

—Choice, rather than structure, is necessary to determine counseling goals for some.

Reference: Shirley A. Griggs, "A Diagnostic Process: Counseling for Individual Learning Styles," *NASSP Bulletin* 65, 447 (October 1981): 23-27; Griggs, "Child Counseling Approaches and How They Relate to Learning Styles," *Early Years* (December 1981): 15-16.

■ BEGINNING A LEARNING STYLES PROGRAM

Three national publications recently described how principals in different states introduced learning styles into their schools. The stories reported extremely divergent approaches which, in effect, substantiate that many administrative styles exist.

Patricia Lemmon of Hutchinson, Kansas, asked the teachers of the learning disabled, remedial readers, and the gifted to profile the characteristics of those students and begin accommodating their learning styles. She then shared that information with her PTA Executive Board and the families of the gifted, and tested some of the parents, to show them what their styles were. She then trained her total faculty and asked them which single component of learning style each would begin using the following fall.

David Cavanaugh of Worthington, Ohio, asked for volunteers who wanted to use a learning styles approach. Teachers chose a diagnostic instrument and, after participating in several workshops, began to experiment. Because he did not want to ask staff to do what he was unwilling to do, Cavanaugh taught a U.S. history course five days a week during the entire first semester. In that way, he learned how to teach through his students' learning styles.

Marcia Knoll of New York City identified the styles of her faculty and then, through their preferences, taught them how to teach to their students' styles.

For reference: Patricia Lemmon, "Step-By-Step Leadership Into Learning Styles," *Early Years* 12, 5 (January 1982): 36-14; David P. Cavanaugh, "Student Learning Styles: A Diag-

nostic/Prescriptive Approach To Instruction," *Phi Delta Kappan* (November 1982): 202-203; Edward B. Fiske, "Teachers Adjust Schooling to Fit Students' Individuality," *The New York Times* 45, 177 (Tuesday, December 29, 1981): C 1-2.

■ COLLEGE HOMEWORK

Phil Lucasse has taken data on learning styles and translated it into practical ways to help undergraduate students study and do homework. In a light, easy-to-read article, he explains learning style and suggests ways of using personal characteristics to memorize important information. Although geared for college students, many high schoolers will understand and be able to benefit from it.

For reference: Philip R. Lucasse, "Learning in Style, Or a Guide to Mousing," *Dialogue*, Grand Rapids, Mich.: Calvin College (February 1981): 13-15.

Note to readers: The authors of these columns welcome feedback and contributions. Address items to Editor, *Educational Leadership*, 225 N. Washington St., Alexandria, VA 22314.

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