

DOCUMENT RESUME

ED 332 165

CS 010 586

TITLE Testing and Assessment. Special Collection Number 1.

INSTITUTION ERIC Clearinghouse on Reading and Communication Skills, Bloomington, IN.

SPONS AGENCY Office of Educational Research and Improvement (ED), Washington, DC.

PUB DATE 91

CONTRACT RI88062001

NOTE 56p.

AVAILABLE FROM ERIC Clearinghouse on Reading and Communication Skills, Indiana University, 2805 E. 10th St., Suite 150, Bloomington, IN 47408-2698 (\$5.95 plus \$2.00 postage and handling).

PUB TYPE Information Analyses - ERIC Clearinghouse Products (071) -- Collected Works - General (020)

EDRS PRICE MF01/PC03 Plus Postage.

DESCRIPTORS Adult Literacy; Dialog Journals; *Educational Assessment; Elementary Secondary Education; Higher Education; Informal Reading Inventories; *Reading Diagnosis; Reading Tests; *Testing; *Writing Evaluation

IDENTIFIERS ERIC Digests

ABSTRACT

Applicable to all levels of education, the eight digests and four FAST (Focused Access to Selected Topics) bibliographies included in this special collection focus on testing and assessment in the fields of reading, writing, listening, and speaking. The material in this special collection is designed for use by teachers, students, administrators, researchers, policymakers, and parents. The digests are on the following topics: Testing Literature: The Current State of Affairs; Evaluating Student Writing: Methods and Measurement; The Issue: Adult Literacy Assessment; How Well Do Tests Measure Real Reading?; Note-Taking: What Do We Know about the Benefits?; Large Scale Writing Assessment; Dialogue Journals; and Assessing Listening and Speaking Skills. The bibliographies deal with the following subjects: strengthening test-taking and study strategies in reading; reading and writing assessment in middle and secondary schools; informal reading inventories; and reading assessment in elementary education. A profile of the ERIC Clearinghouse on Reading and Communication Skills (ERIC/RCS), and information on requesting a computerized search service, searching ERIC in print, submitting material to ERIC/RCS, books available from ERIC/RCS, and an order form are attached. (RS)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *



ED332165

TESTING AND ASSESSMENT

BEST COPY AVAILABLE

CS010586



Clearinghouse on Reading
and Communication Skills



U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

This document has been reproduced as
received from the person or organization
originating it.
 Minor changes have been made to improve
reproduction quality.

• Points of view or opinions stated in this docu-
ment do not necessarily represent official
OERI position or policy.



TESTING AND ASSESSMENT



Clearinghouse on Reading
and Communication Skills



**Published 1991 by:
EDINFO
Carl B. Smith, Director
Smith Research Center, Suite 150
2805 East 10th Street
Indiana University
Bloomington, Indiana 47408-2698
in cooperation with
ERIC Clearinghouse on Reading and Communication Skills
Carl B. Smith, Director**

ERIC (an acronym for Educational Resources Information Center) is a national network of 16 clearinghouses, each of which is responsible for building the ERIC database by identifying and abstracting various educational resources, including research reports, curriculum guides, conference papers, journal articles, and government reports. The Clearinghouse on Reading and Communication Skills (ERIC/RCS) collects educational information specifically related to reading, English, journalism, speech, and theater at all levels. ERIC/RCS also covers interdisciplinary areas, such as media studies, reading and writing technology, mass communication, language arts, critical thinking, literature, and many aspects of literacy.

This publication was prepared with partial funding from the Office of Educational Research and Improvement, U.S. Department of Education, under contract no. RI88062001. Contractors undertaking such projects under government sponsorship are encouraged to express freely their judgment in professional and technical matters. Points of view or opinions, however, do not necessarily represent the official view or opinions of the Office of Educational Research and Improvement.

Acknowledgements

We want to acknowledge the valuable contributions of several of the ERIC/RCS professional staff: Nola Aiex, Digest Editor; Michael Shermis, FAST BIB Editor; Warren Lewis, Academic Publications Editor ; and Carolyn McGowen, our Office Coordinator.

Table of Contents

Introduction	iv-v
Digests	1
Testing Literature: The Current State of Affairs	1-2
Evaluating Student Writing: Methods and Measurement	3-4
The Issue: Adult Literacy Assessment	5-7
How Well Do Tests Measure Real Reading?	9-11
Note-Taking: What Do We Know about the Benefits?	13-15
Large Scale Writing Assessment	17-20
Dialogue Journals	21-23
Assessing Listening and Speaking Skills	25-27
FAST Bibs	29
Introduction	29
Strengthening Test-Taking and Study Strategies in Reading	31-33
Reading and Writing Assessment in Middle and Secondary Schools	35-38
Informal Reading Inventories	39-42
Reading Assessment in Elementary Education	43-46
A Profile	47-48
Computer Search Service	49-50
ERIC in Print	51-52
Submitting Material to ERIC/RCS	53-54
Books Available from ERIC/RCS	55
Order Form	56

ERIC/RCS Special Collection 1: Testing and Assessment

What Are ERIC/RCS Special Collections?

Each *ERIC/RCS Special Collection* contains ten or more Digests and FAST Bibs offering a variety of viewpoints on selected topics of interest and importance in contemporary education. ERIC Digests are brief syntheses of the research that has been done on a specific topic. FAST Bibs (Focused Access to Selected Topics) are annotated bibliographies with selected entries from the ERIC database. Both Digests and FAST Bibs provide up-to-date information in an accessible format.

TESTING AND ASSESSMENT

This material on assessment cuts across educational levels and can be applied to elementary, secondary, higher education, and special populations. Our *Special Collections* are intended as a resource that can be used quickly and effectively by teachers, students, administrators, researchers, policy makers, and parents. The Digests may be consulted for a summary of, or a particular viewpoint on, the research in an area, while the FAST Bibs may be used as the start of a more extensive look into what is available in the ERIC database on a subject of interest.

What are Some of the Important Issues in Testing and Assessment?

In this *Special Collection* we have gathered information on testing and assessment in the fields of reading, writing, listening, and speaking. The field of assessment is changing rapidly. Many people are actively seeking new ways to assess learning by using instruments, other than—or in addition to—standardized tests. Critics of traditional assessment argue that standardized tests often serve political ends more than they do the student, and that they do not authentically reflect a student's achievement. Other people are working to improve currently available standardized tests, and to devise new ones, saying that large-scale assessment is essential to measure educational progress in a diverse population. They point out that, while traditional assessment is no more accurate than the familiar multiple-choice test, alternative assessments may be far less reliable. Those taking center positions in the debate affirm that each of the various different forms of testing has its proper place, and that all test results must be interpreted with caution. Both formal and informal means of assessment should be reliable, valid, and fair. The best means of accomplishing valid and reliable assessment is what the debate is all about.

How Well Do Tests Measure Real Reading?

Some critics of current reading tests claim that these tests measure mastery of reading subskills rather than "real" reading—i.e., the acquisition of meaning. Others assert that many reading tests are indirect; they cannot really measure the reading process, but instead they measure comprehension, on the assumption that the reading process and comprehension are directly related. In a Digest entitled *How Well Do Tests Measure Real Reading?* Janet L. Powell reviews some of the research on the testing of reading comprehension. She describes a study she carried out with sixth-grade readers, and she concludes that multiple-choice questions and written retellings both had construct validity.

How Well Is the Understanding of Literature Assessed?

Alan Purves, in a Digest entitled *Testing Literature: The Current State of Affairs*, says that "the nation's testing programs devote a great deal of energy to testing reading and writing, but they fail to treat literature and cultural literacy seriously....The tests focus on literal comprehension and on the reading of prose fiction. Poetry and drama are seldom included. If literature and its artistic aspects are not made important in those tests which affect students' lives and influence teaching, no wonder that students' knowledge and appreciation are as poor as critics of the schools...claim they are." In a sweeping indictment of most current U.S. tests that try to assess understanding of literature, Purves maintains that multiple-choice questions in these tests focus attention on text comprehension at a relatively low level of understanding, with a somewhat higher

level required to answer essay questions. "The power of literature to capture the imagination of the reader remains unexplored in most assessments, which treat the texts as if they were no different from articles in encyclopedias or research reports."

How Should Student Writing Be Evaluated?

In a Digest entitled *Evaluating Student Writing: Methods and Measurement*, Nancy Hyslop describes some of the ways in which students can be encouraged to read and evaluate their own writing through peer editing, writing groups, conferences, and other means, thereby becoming better readers and writers. She describes some of the informal observations and structured performance-sample assessments that some people feel are more appropriate than standardized tests to evaluate progress in writing.

Alternative Language-Arts Assessment

Portfolio assessment and a variety of other techniques constitute what may be collectively described as "alternative assessment." In August 1990, a national symposium on alternative assessment was held in Bloomington, Indiana, sponsored jointly by ERIC/RCS, the IU Center for Reading and Language Studies, and Phi Delta Kappa. People holding a wide variety of views regarding the best ways to assess learning in the language arts were present. Represented were the education profession, including school teachers, school administrators, and professors; political bodies at the local, state, and federal levels; formal testing agencies; and test instrument developers and publishers. The proceedings of that symposium are now available in book-form: *Alternative Assessment of Performance in the Language Arts*. To obtain this book, please see the order form at the end of this Special Collection.

These and other topics are addressed in this collection of ERIC materials. Our intention is to help you become more familiar with some of the issues and research behind the current controversy over testing and assessment in the United States. We hope you will find this ERIC/RCS Special Collection useful.

Further Information in the ERIC Database

In addition to the citations found in the annotated bibliographies included in this collection, others may be located by searching the ERIC database. A few of the terms that would be useful in undertaking a search are these:

Educational-Assessment, Evaluation-Methods, Testing-, Tests-, Evaluation-, and Informal-Assessment

ERIC Clearinghouse on Tests, Measurement, and Evaluation

The ERIC Clearinghouse on Reading and Communication Skills is concerned with testing and assessment as it applies to reading, writing, speaking, and listening. However, the ERIC system has a clearinghouse that deals with tests, measurement, and evaluation in the entire field of education. Please contact it for further information:

ERIC Clearinghouse on Tests, Measurement, and Evaluation
American Institutes for Research
Washington Research Center
3333 K Street, NW
Washington, DC 20007-3541
Telephone: (202) 342-5060

Ellie Macfarlane
Series Editor, *ERIC/RCS Special Collections*



Digest

Clearinghouse on Reading and Communication Skills

Indiana University
2805 E. 10th St., Suite 150

Bloomington, IN 47408-2698
(812) 855-5847

Testing Literature: The Current State of Affairs

by Alan C. Purves

Many who have seen Robin Williams as Mr. Keating in *Dead Poet's Society* have said that things aren't that way now. The schools don't treat literature as a set of dead facts that can be weighed and measured. Mr. Keating was a voice in the wilderness of the 1950's but things have changed now. Or have they? If you look at the tests that face today's students, you would see that Mr. Keating has been thoroughly routed from the schools. Such are the findings of a new report of the Center for The Learning and Teaching of Literature at the University at Albany, which is sponsored by the Office of Educational Research and Improvement of the United States Department of Education and by the National Endowment for the Arts.

The nation's testing programs devote a great deal of energy to testing reading and writing, but they fail to treat literature and cultural literacy seriously. The artistic aspects of literature and the cultural heritage of our society are not reflected in the nation's tests and as a result lead to neglect by the schools. The tests focus on literal comprehension and on the reading of prose fiction. Poetry and drama are seldom included. If literature and its artistic aspects are not made important in those tests which affect students' lives and influence teaching, no wonder that students' knowledge and appreciation are as poor as critics of the schools like E. D. Hirsch, Jr., Diane Ravitch, and Allan Bloom claim they are.

State Policies

The study includes a census of the state assessment offices to find out the states' policy towards literature learning and its testing. (See Table.) Testing of learning in literature is not emphasized as a separate topic by most states, but is treated as an aspect of reading. What this means in practice is that reading assessments either include some passages from literary works in their mix of sources of

texts or include a literature section as a sub-test within a reading assessment. Only two states have a humanities assessment and thus include literature as an aspect of general cultural and intellectual history. Fewer than a quarter of the states (mostly in the Northeast) measure student knowledge of specific authors and titles, literary terminology, or general cultural information, and only two of the states report that these particular measures are used to help determine promotion or graduation. Reading is important in state assessment or competence tests, but literature plays a minor role.

Content versus Knowledge

The second part of the study was an analysis of all of the published tests produced for secondary school students including those in anthology series and those used in the state assessments. The analysis covered the sorts of knowledge and skill that were measured. Most of the tests use multiple-choice questions. Almost universally, the focus of the questions is on the comprehension of content, particularly on the meaning of specific parts or of the main idea or theme of a passage which is given to the student to read. Only in college placement tests is there some emphasis on knowledge, primarily of authors and titles. As to aspects of the text other than content, there is relatively scant attention paid, and notably absent from the tests are any items dealing with such artistic characteristics of literature as language, structure, and point of view.

Typical Tests

When one turns to the critical skills demanded in these tests, a similar pattern emerges. The vast majority of the items in all tests focus on recognition and recall and on the application of knowledge to

Alan C. Purves is a Director of the Center for the Learning and Teaching of Literature, University at Albany.

the given text. There is relatively little attempt to deal with such complex mental operations as analysis, interpretation, and generalization.

A typical test will have a two-paragraph excerpt from a novel or story and follow it with three or four questions like these fictitious examples:

- In line 10, the word *rogue* means: a) stranger, b) out of control, c) colored with red, d) falling apart
- The two people are: a) father and son, b) brothers, c) husband and wife, d) strangers
- This section is about: a) the end of an adventure, b) the relationship between people and animals, c) the climax of a journey, d) the break-up of a family

Such questions hardly tap the imaginative power of fiction or drama; in fact they reduce them to the level of textbooks where the knowledge is factual. Some of the published texts go so far as to ask true or false questions like: *Huckleberry Finn is a good boy*, or *Hamlet is Mad*. As a result, students find that they do not have to read the selection; they can turn to plot summaries or simplified study guides.

Summary and Conclusions

In summary, multiple-choice questions focus their attention on text comprehension at a relatively low level of understanding. They do so without clear differentiation between reading a literary selection and reading a non-literary one; any text is viewed as

having content that can be easily summarized into a single main idea, point, gist, or theme. When a test includes an essay question, the level is higher. Most of the essays call for some sort of summary or critical comment, usually addressed to the content of the selection and its interpretation. There is little emphasis on form or aesthetic judgment.

By and large the tests that now exist in the United States do not live up to the standards set by the examination systems of countries in which student achievement in literature is high. There is little focus on students' abilities to penetrate a text or to use the array of cultural and literary knowledge that should have been made available to them. The power of literature to capture the imagination of the reader remains unexplored in most assessments, which treat the texts as if they were no different from articles in encyclopedias or research reports. This state of affairs is contrary to the type of approach to literature that Mr. Keating espoused.

A copy of the complete report, P. Brody, C. DeMilo, and A. C. Purves, *The Current State of Assessment in Literature Report Series 3.1* is available from the Center for the Learning and Teaching of Literature, University at Albany, State University of New York, 1400 Washington Avenue, Albany, NY 12222 (\$7.00) and through the ERIC Clearinghouse on Reading and Communication Skills, Indiana University, Smith Research Center, Suite 150, Bloomington, IN 47408-2698. [ED 315 765]

**Table: State Assessments of Literature Achievement
1987-1988 School Year**

How Literature is Assessed (n=number of states)	Northeast (n=11)	Southeast (n=13)	Central (N=12)	West (n=15)	Total (n=51)
As a Separate Area					
Commercial Test	0	0	0	0	0
State Developed	3	0	1	1	5
Both	0	0	0	0	0
Through Reading					
Commercial Test	3	1	4	1	9
State Developed	5	1	1	3	10
Both	0	8	1	3	12
Through Writing					
Commercial Test	0	0	0	0	0
State Developed	1	0	1	1	3
Both	0	0	0	0	0
Through Humanities					
Commercial Test	0	0	0	0	0
State Developed	2	0	0	0	2
Both	0	0	0	0	0
Total Assessing					
Literature in Any	8	10	6	7	31
Percent of States	73%	77%	50%	47%	61%

Sample was the 50 U.S. States and Washington, D.C.



Evaluating Student Writing: Methods and Measurement

by Nancy B. Hyslop

Persons involved in the field of composition have sought continuously over the past two decades to shape and refine discourse theory and develop more effective classroom methods of evaluation. A careful look at these efforts suggests that the material dealing with evaluating writing is not unlike the body of a hydra: we have one theoretical body supporting two heads. Using one of the heads, we develop various methods to critique or respond to students' written products (even as these products represent a stage in the writing process); with the other head we devise ways to measure or assess the quality of the written product according to some value system. This digest will consider (1) the methods of response and (2) the measurement of quality as represented by effective classroom teaching methods.

Methods of Response

Responding to student writing is probably the most challenging part of teaching writing. It not only takes a tremendous amount of time and demands a great deal of intellectual activity, it also affects to a large extent how students feel about their ability to write. It becomes increasingly obvious that teachers may become less pressured and more effective in dealing with response only as they are able to redefine their role from that of an examiner who must spend enormous amounts of time grading every paper to that of a facilitator who helps students recognize and work on their own strengths and weaknesses (Grant-Davie, 1987).

Effective time-saving techniques which reflect this philosophy were gathered from research articles by Fuery and Standford and classified by Krest (1987). Peer revision, peer editing, peer grading, computer programs, conferences, and a system of error analysis are presented as effective measures which enhance individual development as well as encourage more student writing.

Noting that research has shown teacher comment has little effect on the quality of student writing,

Grant-Davie and Shapiro (1987) suggest teachers should view comments as rhetorical acts, think about their purpose for writing them, and teach students to become their own best readers. To achieve this goal, teachers should respond to student drafts with fewer judgments and directives and more questions and suggestions. Grant-Davie and Shapiro also outline the use of a workshop which utilizes peer editing and revision.

Similarly, Whitlock (1987) explains how Peter Elbow's concepts of pointing, summarizing, telling, and showing can form the basis of an effective method for training students to work in writing groups and give reader-based feedback to peer writing.

Measuring Writing Quality

According to the Standards for Basic Skills Writing Programs developed by the National Council of Teachers of English and reprinted in *National Standards: Oral and Written Communications* (1984), when we measure the quality of students' writing we should focus on before and after samplings of complete pieces of writing.

To measure growth in the use of these conventions, an analytic scale analysis of skills (Cooper and Odell, 1977) can be developed and used effectively with samples of students' writing. This instrument describes briefly, in non-technical language, what is considered to be high, mid, and low quality levels in the following areas: (1) the student's ability to use words accurately and effectively; (2) the ability to use standard English; (3) the ability to use appropriate punctuation; and (4) the ability to spell correctly. Each of these skills is ranked for each paper on a continuum from 1 (low) to 6 (high) (Hyslop, 1983).

In addition to these instruments, various teacher/writers in the field share the following strate-

Nancy B. Hyslop has taught writing both at the secondary and the university level, most recently at the University of Evansville.

gies they have developed for measuring writing quality.

Teale (1988) insists that informal observations and structured performance sample assessments are more appropriate than standardized tests for measuring quality in early childhood literacy learning. For example, when young children are asked to write and then read what they have written, the teacher can learn a great deal about their composing strategies and about their strategies for encoding speech in written language. Krest (1987) provides helpful techniques of a general nature to show teachers how to give students credit for all their work and how to spend less time doing it. These techniques involve using holistic scoring, using a somewhat similar technique of general comments, and using the portfolio. Harmon (1988) suggests that teachers should withhold measuring students' progress until a suitable period of time has elapsed which allows for measurable growth, and then measure the quality of selected pieces of writing at periodic intervals.

Cooper and Odell (1977) suggest that teachers can eliminate much of the uncertainty and frustration of measuring the quality of these samples if they will identify limited types of discourse and create exercises which stimulate writing in the appropriate range but not beyond it. In their model, they present explanatory, persuasive, and expressive extremes as represented by the angles of the triangle. Each point is associated with a characteristic of language related to a goal of writing, with assignments and the resulting measure of quality focused on that particular goal.

Current Directions

Writing teachers are moving increasingly toward this type of assessment of writing quality. Hittleman (1988) offers the following four-part rating scale to be used after the characteristic to be evaluated is established: (1) little or no presence of the characteristic; (2) some presence of the characteristic; (3) fairly successful communication...through detailed and consistent presence of characteristic; and (4) highly inventive and mature presence of the characteristic.

Krest (1987) presents an interesting modification of this process by measuring the quality of students' papers with the following levels of concerns in mind: (HOCs) high order concerns: focus, details, and organization; (MOCs) middle order concerns: style and sentence order; and (LOCs) lower order concerns: mechanics and spelling.

Skills Analysis

One of the 29 standards for assessment and evaluation in the NCTE report states that control of the conventions of edited American English...spelling, handwriting, punctuation, and grammatical usage...(should be) developed primarily during the writing process and secondarily through related exercises.

All in all, it appears that true growth in writing is a slow, seldom linear process. Writing teachers have a wide variety of responses they can offer students before making formal evaluations of the text (Harmon 1988).

References

- Cooper, Charles R., and Lee Odell. *Evaluating Writing: Describing, Measuring, Judging*. Urbana: National Council of Teachers of English, 1977, 37-39. [ED 143 020]
- Grant-Davie, Keith and Nancy Shapiro. Curing the Nervous Tick: Reader-Based Response to Student Writing. Paper presented at the Annual Meeting of the Conference on College Composition and Communication, March 1987. [ED 282 196]
- Harmon, John. The Myth of Measurable Improvement. *English Journal*, 77(5) September 1988, 79-80. [EJ 376 076]
- Hittleman, Daniel R. *Developmental Reading, K-8, Teaching from a Whole-Language Perspective* 3rd ed. Columbus, OH: Merrill, 1988.
- Hyslop, Nancy B. A Study to Test the Effects of Daily Writing upon Students' Skills in Explanatory Discourse at the Eleventh Grade Level. Unpublished dissertation, 1983.
- Krest, Margie. Time on My Hands: Handling the Paper Load. *English Journal*, 76(8) December 1987, 37-42. [EJ 367 295]
- National Standards: Oral and Written Communications*. Washington Office of the State Superintendent of Public Instruction, Olympia, 1984. [ED 297 351]
- Teale, William H. Developmentally Appropriate Assessment of Reading and Writing in the Early Childhood Classroom. *Elementary School Journal*, 89(2) 1988. [EJ 382 620]
- Whitlock, Roger. Making Writing Groups Work: Modifying Elbow's Teacherless Writing Groups for the Classroom. Paper presented at the Annual Meeting of the Conference on College Composition and Communication, March 1987. [ED 284 284]



Digest

Clearinghouse on Reading and Communication Skills

Indiana University
2805 E. 10th St., Suite 150

Bloomington, IN 47408-2698
(812) 855-5847

The Issue: Adult Literacy Assessment

by Elizabeth Metz

Literacy assessment is a multifaceted issue in adult education. Much of the problem occurs because there is no one definition of literacy. Currently, literacy seems to be equated with functional literacy, but does this mean illiterates can't function well enough to hold any job, or a particular job? Or, does it mean that they can't read prescription labels, warnings on household chemicals, labels in the grocery store, or street signs? Or, maybe it means they can't write a letter to a friend. There are almost as many definitions of functional illiteracy as there are adult illiterates because it is a personal issue. The common thread is the "desire to gain control of their lives" (Johnson, 1988, from Tuiman, 1987, quoting Luria, 1976).

The variety of definitions is reflected in the vast array of adult education programs such as those offered through public school districts, state education offices, Literacy Volunteers of America, Laubach, public libraries, industry, and the federal government tied to the Job Training Partnership Act and the Departments of Agriculture, Defense, Health and Human Services, Interior, Justice, and Labor (Newman, 1986). Some programs are learner centered, some competency based and some job centered. The instructors may be anywhere on a continuum from volunteers who have received only a few hours' training to certified professional adult educators.

Assessment Methods?

How does one assess literacy under such circumstances? Chall states that "there are few tests specifically meant for adults (and) there seems to be a hesitation in using them" (quoted in French, 1987). One commonly used test, TABE (Test of Adult Basic Education), until recently was normed on children and most are scored using grade level equivalents. This is a "legacy from our definition of literacy as a level of achievement" (French, 1987).

French suggests that informal testing would be one direction to follow which would allow for a "more personal perspective." One common goal should be that "assessment integrates both curriculum and student-identified goals and needs" (Hines, 1988).

Some Adult Literacy Programs

Time to Read is a national volunteer literacy program designed by Time Inc. Tutoring programs, both group and one-on-one, are built around respect for the learner and his/her interests. The learner's progress is assessed through activity sheets, answer keys and recording forms. Pre-post reading tests and self-assessment instruments are also used. *Time to Read* considers that the "key to effective assessment of learner progress (is the) close interaction between tutors and learners" (Cardwell, 1988).

The Center for Literacy, Philadelphia, provides a curriculum based on the individual learner's goals, interests and needs. Underlying assumptions are that literacy is social and that the learners come with their own goals and objectives; have their own perception of literacy, teaching, and learning; develop ideas about literacy from assessment measures; and build expectations by the method of assessment. *The Center for Literacy* uses planning conferences during the intake session and every six months for assessment. Items such as the learner's everyday life, reading and writing strategies, interests, perceptions of reading and writing, and goals are taken into consideration. A portfolio of the learner's accomplishments and current work is kept and completion is measured in relation to the learner's goals. The advantages are felt to be: a direct translation to instruction, emphasis on what the learner can do, a focus on motivating personal

Elizabeth Metz is Supervisor of the Reading Practicum at Indiana University.

goals, elimination of test anxiety, communication of respect, and the active role of the learner. The limitations are the lack of quantitative information, the time taken, and the need for greater staff expertise. (For a short-term longitudinal study of 76 adults enrolled in this program see Lytle and others, 1986.)

The Federal Prison System (Muth, 1988) reading programs are standardized test oriented. Inmates take the ABLE (Adult Basic Learning Examination) on entry into the system. If they score less than 8.0 (grade level) on any subtest, they are required to attend Adult Basic Education classes for 90 days. The problem the prison system has seen with the use of ABLE is that each institution develops its own program. There is a movement to a skills core curriculum that focuses on skills assessed by ABLE, although this has aroused some controversy.

Project: *LEARN*, Cleveland, (Oakley, 1988) uses volunteer tutors trained in the use of Laubach materials. (For a discussion of the Laubach program, see Meyer and Keefe, 1988.) Assessment of learners begins at the intake interview through an attempt to see how well the learners can do the early lessons. The Project: *LEARN* personnel did a one-time study (1982-3) of the use of ABLE and found it to be time consuming and expensive. They also felt that the ABLE does not test what they teach, that their learners felt anxiety, and that the norming population did not match theirs. They are now using the WRAT (Wide Range Achievement Test) and the learners' goals, which give them a baseline for later assessment (Oakley, 1988).

The City University of New York Adult Literacy Program (Oppenheim, 1988) specifies that standardized tests should be only one component of assessment. Student survey results, anecdotal reports, and the learner's own writing are included in assessment. The learner is given the TABE upon entry and after 100 hours of instruction. There is also a structured interview in which the learner's goals, preferred learning style, and learning objectives are noted. Currently, several other methods of assessment are being studied.

The Greece Central School District Continuing Education Division, North Greece, New York, also uses the TABE, as well as assessing their learners at entry through interviews by teacher/counselors. Both aspects are felt to be necessary, especially the informal and non-threatening interview. Assessment then becomes ongoing, using a diagnostic-prescriptive model (Rupert, 1988).

CASAS (Comprehensive Adult Student Assessment System) is used in all California programs that receive federal Adult Basic Education Act 306

funds. Assessment is "linked directly to (203) identified competency statements across a continuum of difficulty" (Rickard, 1988; Rickard and Stiles, 1985) which are updated annually. All the materials used in the program are coded to this list. When learners first enter the program, their needs and skills are assessed through an interview. They are then placed in an appropriate class and given the CASAS Pretest and post-tested after 100 hours of instruction. CASAS users feel that it works well, since all aspects of the program are integrated with the competencies. The difficulty has been in record keeping, a problem they hope to solve with use of a computerized management system.

The Literacy Volunteers of America-Danbury, CT assess all learners using LVA READ on entry and again after 6 months or 50 hours of instruction. The students are also asked what they want to accomplish. The tutor is encouraged to "constantly listen to expressed desires and needs as tutoring progresses" (Stark, 1988). Achievement of goals is measured not only through an objective instrument but also through the successful completion of a life skill. As tutors do not always record these latter achievements from failure to understand their importance, the program wants to develop competency-based education.

California Literacy Campaign is a statewide library-based program (Sclorzano, 1988; Strong, 1986). Each site is encouraged to develop a program that fits the needs of its unique area. In response to the need for better learner assessment, the California Adult Learner Progress Evaluation Process (CALPEP) was developed to measure learner progress through changes in "learners' reading and writing habits, learner perceptions of reading and writing progress, and goal attainment" (Sclorzano, 1988). CALPEP is utilized at entry and at six month intervals. Progress is charted by both tutors and learners.

Assessment Tools

From the above it is obvious there is a wide variance in assessment tools used and views of them. There does seem to be a general acknowledgement that what is available needs improvement. Standardized tests do not appear to be the answer as they are related to former failure, give a one-sided view of a multi-sided problem, and often do not measure anything which pertains to the goals of the learner. Competency-based programs also have a similar problem as they tend to be imposed on a learner.

Assessment of the adult learner apparently needs to be on an informal basis. The cultural, phys-

iological, psychological and educational characteristics of the learner should be noted through a series of informal interviews over a period of several sessions. Learner interests and goals should be discussed on an ongoing basis by the tutor and learner.

While these methods of assessment will probably take more time than a standardized test and formal intake interview, the results would be worth the extra time. Rapport would be built between learner and tutor, the self-image of the learner would be enhanced, and the goals and needs of the individual learner would be met. Success would be built into the program. Progress would be noted as each goal of the learner is reached and new goals would be established as part of an ongoing assessment program.

References

- Fitzgerald, G. A report on the entry level scores of 1514 illiterate adults, 1981.
- French, J. *Adult literacy: A source book and guide*. New York: Garland, 1987.
- Lytle, Susan L. & others. "Literacy Theory in Practice: Assessing Reading and Writing of Low-Literate Adults." Paper presented at Annual Meeting of the American Educational Research Association, San Francisco, 1986. [ED 278 675]
- Meyer, Valerie & Keefe, Donald (1988). "The Laubach Way to Reading: A Review." *Lifelong Learning*, 12 (1), 8-10. [EJ 375 819]
- Nafziger, D. H., Thompson, R. B., Hiscox, M. D., & Owen, T. R. (1975). Tests of functional adult literacy: An evaluation of currently available instruments. U. S. Office of Education, Office of Planning, Budget and Evaluation Contract No. 300-75-0098.
- National Adult Literacy Symposium, Washington, DC. September 1988. The following authors quoted in this digest presented papers at the symposium: Cardwell, J.; Hines, J.D.; Johnson, D.; Muth, W.R.; Oakley, N.; Oppenheim, L.; Rickard, P.; Rupert, D.F.; Solorzano, R.W.; and Stark, R.
- Newman, Anabel P. *An evaluation of the impact of the Advertising Council's "Volunteer against Illiteracy" campaign on public awareness of and resources devoted to adult literacy for 1985 sponsored by the Coalition for Literacy*. Bloomington, IN : Indiana University, 1986. [ED 293 979]
- Rickard, Patricia L. & Stiles, Richard L. (1985). "Comprehensive Adult Student Assessment System (CASAS) Design for effective assessment in correctional education programs." *Journal of Correctional Education*, 36 (2), 51-53. [EJ 317 788]
- Strong, Gary E. (1986). Adult Illiteracy: State Library Responses. *Library Trends*, 35 (2), 1986, 243-61. [EJ 347 675]
- "Time to Read" *Approach to Reading*. New York: Time, Inc., 1988. [CS 009 738]



How Well Do Tests Measure Real Reading?

by Janet L. Powell

Despite a significant increase in test usage across the country, numerous issues surrounding the testing of reading remain unresolved. (See Johnston, 1986.) How validly it reflects what people actually do when they read is the most important consideration of any reading test. Construct validity—whether the test actually measures aspects of the behavior under consideration—is of particular importance if one is to rely on test scores to direct instruction, predict performance, or determine accountability. In 1917, Thorndike (see 1971 reprint), who defined reading as reasoning, helped promote the examination of reading as a cognitive process as thought guided by printed symbols (Farr and Roser, 1979).

Are We Measuring Process?

This slowly but continually emerging trend to recognize reading as a thinking process has been at the core of the controversies over the validity of various forms of reading assessment. Many critics of reading tests claim that most current approaches to the assessment of reading comprehension remain—as they have always been—measures of reading comprehension as a product of a reader's interaction with a text. Unable to assess the processes involved in comprehension, the tests measure comprehension as required responses that are the products of reading (Johnston, 1983).

Virtually all methods of assessing reading are indirect, even those that *claim* to directly assess reading *processes*. We cannot actually see the processes involved; we can only infer how a reader has comprehended. Therefore, all scores or data produced by tests of reading are indirect measures of the reading process.

The product of reading should, however, reflect the process the test-taker uses to generate the responses that produce a reading comprehension test score. That is to say that one ought to be able to

assume that differences in test scores across test-takers and testing instances will reflect differences in the processes used to read the test passage and to respond as directed. How *directly* the two relate has never been determined; nor do we know how effectively test results can inform and direct the teaching of reading behaviors—even when those behaviors appear to be very similar to those that produce the test product. How well tests that do not emphasize or examine product might direct instruction that purports to develop process is a matter understood even less.

Farr (1986) states that “the manuals of most standardized tests make very explicit the fact that the test will not provide information about a pupil's reading *processes*, but only information about the *product* of reading.” However, he continues by saying that “...one could argue that the product—or score—isn't valid if a pupil doesn't use the actual processes of reading in determining the answers.” The validity question that surrounds the tests thus seems to be whether or not taking the test *appears* to change the processes involved in comprehension and to solicit significantly atypical reading processes.

Metacognition Focuses on Process

A reader's awareness of thought processes involved in reading has recently come to be known as *metacognition*, and test designers are now including items that supposedly measure this (Aronson and Farr, 1988). The general knowledge of the reader guides him or her in monitoring comprehension processes through the selection and implementation of specific strategies to achieve some predetermined goal or purpose for reading. The chief idea involved in metacognition is that learners must actively monitor their use of thinking processes—that they must be aware of how they are processing

information—and that they can then regulate them according to the purpose for reading.

The interest in metacognition among reading educators has led to an exploration of procedures to collect data on thinking processes. Data collection on mental processes has become known as *introspective data*—concurrent and retrospective verbal reports. Concurrent verbal reports are collected as *the subject is engaged in the reading task*. These types of reports have been criticized for interfering with the normal processes of reading (Nisbett and Wilson, 1977; Garner, 1982). Retrospective verbal reports are collected after the subject has completed the reading task. These types of reports have been criticized because subjects may forget or inaccurately recall the mental processes they employed while completing the task (Afflerbach and Johnston, 1984).

There are differences of opinion as to the validity and reliability of verbal report data in general. However, many prominent researchers agree that verbal reports, when they are elicited with care and interpreted with full understanding of the circumstances under which they were obtained, are valuable and thoroughly reliable sources of information about cognitive processes (Afflerbach and Johnston, 1984).

Verbal Reports May Reveal Reading Processes

Research that focuses on the metacognitive aspects of reading while taking a reading test comprise only a very small portion of the literature. At least three studies, however, have used verbal reports to investigate reading processes as subjects are engaged in taking reading comprehension tests. Using concurrent verbal reports, Wingenbach (1984) examined the comprehension processes employed by twenty gifted readers in grades 4 through 7 to identify the metacognitive strategies they employed as they read the *Iowa Test of Basic Skills*, a multiple-choice standardized reading test.

Wingenbach found that subjects reported using a variety of reading strategies to comprehend the text and to answer the questions. The strategies included using context clues, rereading, inferencing, personal identification with the text, and imagery. Wingenbach did not use as a comparison any other text types, making it impossible to determine whether or not the subject's mental processing was different on the test than on any other reading task.

Alvermann and Ratekin (1982) conducted a study with 98 "average" seventh-grade and eighth-grade subjects. The subjects completed a multiple-

choice test and an essay test. Only retrospective reports were collected. Results of an analysis of the verbal protocols revealed that 55 subjects reported using only one reading strategy, while 30 reported using two or more. Thirteen subjects were unable to recall any specific strategy. In the report, Alvermann and Ratekin elaborate only on the statistically significant differences in strategies. They found that subjects who read to respond on an essay test "reread" more frequently than students who read the same passage knowing they will respond to multiple-choice items. In addition, subjects who read to complete an essay test reported using multiple strategies nearly twice as often as students who read for a multiple-choice test.

Other differences that were not statistically significant, may be important nevertheless. An examination of a chart representing the frequency of reported strategies shows that students read for details twice as often in the multiple-choice test as they did in the essay test. There were four reports of imaging (forming a picture of the text) in the essay test compared to one in the multiple-choice test. Subjects made a personal connection with the text an average of seven times when taking the multiple-choice test but only three during the essay test.

The use of only retrospective verbal reports severely limits the conclusions made by the researchers. When retrospection alone is used, the chances that the subjects forgot the mental processes they employed are greatly enhanced. In addition, the differences found may have been due to individual or group differences rather than task-related differences. There is little information in the report to support that the two groups were equivalent.

Powell (1988) conducted a study with nine proficient sixth-grade readers. All the subjects were observed, and they provided concurrent verbal reports as they were engaged in multiple-choice tests, cloze tests, written retellings, and a nonassessed reading task. The subjects gave retrospective verbal reports afterward. Twenty-one reading processes were identified from the verbal reports. The overall conclusions of this investigation indicated that the reading processes did differ as subjects were engaged in each of the tasks. The task which elicited behavior the most different from the other three was the cloze test. Subjects reported rereading and using context clues a great deal more on this task than on any of the others. They tied prior knowledge to the text and paraphrased the text a great deal less than in performing the other reading tasks.

The multiple-choice test and the written retellings, on the other hand, were very similar to each other and to the nonassessed reading task. The

subjects reported tying prior knowledge in with the text, visualizing what was happening in the text, and paraphrasing the text almost with equal frequency across all three tasks. Therefore, within the limitations of the Powell study, it can be concluded that multiple-choice tests and written retellings had construct validity. While the scores (products) of these tests may not reveal direct information on the processes students use to complete them, the tasks do appear to involve mental processes that have long been associated with reading.

References

- Afflerbach, Peter, and Johnston, Peter. "On the use of verbal reports in reading research," *Journal of Reading Behavior*, 16 (4), 1984, pp. 307-322.
- Alverman, Donne, and Ratekin, Ned. "Metacognitive knowledge about reading proficiency: Its relation to study strategies and task demands." Paper presented at the Annual Meeting of the American Educational Research Association, 1982.
- Aronson, Edith, and Farr, Roger. "Issues in assessment," *Journal of Reading*, 32 (2), November 1988, pp. 174-177.
- Farr, Roger. "A response to Hoopfer and Hunsberger," *Forum in Reading and Language Education*, October 1986, pp. 129-133.
- Farr, Roger, and Roser, Nancy. *Teaching a child to read*. New York: Harcourt Brace Javanovich, 1977.
- Garner, Ruth. "Verbal-report data on reading strategies," *Journal of Reading Behavior*, 14 (2), 1982, pp. 159-167.
- Johnston, Peter. *Reading comprehension assessment: A cognitive basis*. Newark, Delaware: International Reading Association, 1983, 102 pp. [ED 226 338]
- Johnston, Peter. "Assessing the process and the process of assessment in the language arts." In James Squire (Ed.), *The dynamics of language learning: Research in the language arts*. Urbana, Illinois: National Council of Teachers of English, 1986, 420 pp. [ED 280 080]
- Meichenbaum, D.; Burland, S.; Gruson, L.; and Cameron, R. Metacognitive assessment. In S. R. Yussen (Ed.), *The growth of reflection in children*. Orlando: Academic Press, 1985.
- Nisbett, Richard, and Wilson, Timothy. (1977). "Telling more than we can know: Verbal reports on mental processes," *Psychological Review*, 84 (3), 1977, pp. 231-259.
- Powell, Janet L. "An examination of comprehension processes used by readers as they engage in different forms of assessment." Unpublished Doctoral Dissertation, Indiana University, 1988. 196 pp. [ED 298 449]
- Thorndike, Edward. "Reading as reasoning: A study of mistakes in paragraph reading," *Reading Research Quarterly*, 6 (4), 1971 [reprint of original 1917 article], pp. 425-434.
- Wingenbach, Nancy (1984). "The gifted reader: Metacognition and comprehension strategies." Paper presented at the 3rd Annual Meeting of the National Council of Teachers of English, Spring Conference, 1984. 29pp. [ED 243 093]



Note-taking: What Do We Know about the Benefits?

by Jeff Beecher

Research on note-taking has generated debates since C. C. Crawford began his studies in the 1920s. Initially the debates centered on whether note-taking resulted in improved student performance on tests. Over the years, researchers have tried to verify that note-taking helps students "encode" the information involved and that notes are valuable as materials for review (Ladas, 1980).

The research findings on whether note-taking promotes encoding have been mixed. Hult et al. (1984), for example, found that note-taking does involve semantic encoding; but Henk and Stahl (1985) found that the process of taking notes in itself does little to enhance recall. They found, however, that reviewing notes clearly results in superior recall. Their conclusions were dramatically different from those of Barnett et al. (1981), who found "strong support" for the encoding function of note-taking but not for the value of using notes to review material.

Does Note-taking Promote Encoding?

In 1925, Crawford published a study which sought to verify his observation that there is a positive correlation between analyses of college students' lecture notes and their grades on subsequent quizzes. He concluded that taking notes was better than not taking notes, that reviewing notes was a key to their impact, and that organizing notes effectively contributes to improved performance on tests.

After a lull in note-taking research, Ash and Carlton (1953) worked with instructional films and concluded that films lacking necessary pauses and repetitions led to note-taking attempts which actually interfered with listening comprehension and learning. McClendon (1958) used taped lectures

and concluded that note-taking doesn't interfere with listening, that no particular note-taking method is best, and that students might as well record as much as possible during note-taking.

In 1970, Howe concluded that students were seven times more likely to recall information one week after it was presented if the information had been recorded in their notes. Howe argued that "the activity of note writing *per se* makes a contribution to later retention..." (p. 63)

Di Vesta and Gray (1972) observed that "note taking* and rehearsal function as learning aids which facilitate learning" (p. 134), while Fisher and Harris (1974) found that students perform better when they are allowed "to encode in the way that they prefer" (p. 386)—using notes or other strategies.

There is growing evidence that note-taking combined with critical thinking facilitates retention and applications of the information. Bretzing and Kulhary (1979) compared note-taking that indicated in-process semantic processing (encoding) with verbatim note-taking and found that subjects who took verbatim notes scored lower on comprehension tests than those who processed information at a higher level while they took notes. Einstein et al. (1985) found that successful college students engaged in greater integrative processing during note-taking, and that note-taking itself "enhances organizational processing of lecture information." (p. 522)

Anderson and Armbruster (1986) concluded that there is a benefit to students when the lecture environment permits deep processing while taking

*Over the years the term note-taking has been spelled several ways. Webster's Third New International (1986) lists it only with the hyphen, but notetaker as one word.

Note-taking: What Do We Know about the Benefits?

notes. Denner (1986) describes a method of using "episodic organizers"—a kind of semantic web or map—to produce a positive encoding effect when seventh-grade subjects were reading complex narrative passages.

Is Reviewing Notes an Effective Learning Strategy?

The importance of reviewing notes was mentioned briefly by Crawford in 1925. In 1973, Fisher and Harris concluded that "note taking serves both an encoding function and an external memory function [reviewing], with the latter being the more important." (p. 324) Kiewra (1983) found that reorganizing notes *while reviewing* led to higher test achievement. The Cornell system of note-taking encourages this practice (King et al., 1984).

In a report on their study which allowed students to review their notes immediately before a test, Carter and Van Matre (1975) argued that the benefit of note-taking appeared to be derived from the review rather than from the act of note-taking itself. They even went so far as to suggest that reviewing notes may actually cue the student to reconstruct parts of the lecture not initially recorded in the notes. An interesting study by Kiewra (1985) also endorsed the value of review—but not of student notes. He suggested that "Teachers should be aware of students' relatively incomplete note-taking behaviours, and therefore, encouraged to *provide* learners with adequate notes for review." (p. 77; emphasis added)

What Does the Research Suggest to the Teacher?

An increasing number of sources try to synthesize the implications of research on note-taking to benefit and advise educators (e.g., Kiewra, 1987). Much of the synthesis relates directly to teacher/instructor presentation of material. Earlier researchers had offered such suggestions: Ash and Carlton (1953) recommended that students be supplied with prepared notes for pre-film and post-film study. Based on his study of college students' notes, Locke (1977) suggested stressing the importance of material that is not written on the board, announcing explicitly the precise role that lectures play in the course, and combating student fatigue by providing a rest break. (p. 98)

In his underlining and note-taking research synthesis for students and teachers, McAndrew (1983) suggested that instructors use a spaced lecture format, insert verbal and nonverbal cues into lectures to highlight structure, write important material on the blackboard, avoid information overload when

using transparencies or slides, tell students what type of test to expect, and use handouts that give students room to add notes. Carrier and Titus (1981) asked teachers to devote some class time exclusively to a review period before an exam—an emphasis like that placed on reviewing by Carter and Van Matre (1975), who had also stressed highly organized lectures.

What Are the Current Research Interests?

Note-taking research, along with educational research in general, has begun to concentrate on the cognitive processes of individual learners (Kiewra and Frank, 1985). The relevance of schema theory (Shaughnessy and Evans, 1986) and of metacognition (Tomlinson, 1985) has been studied in recent years.

Kiewra and Benton (1988) have been studying "the relationship between lecture note-taking behaviors and academic ability by using more global measures of ability, such as GPA and predictive achievement test scores. In addition, they have considered a) scores on an information-processing ability test, b) analysis of notes taken during a designated lecture, c) scores on a test based on a lecture, and d) scores on a course exam covering several lectures. They concluded that the "amount of notetaking is related to academic achievement" and the "ability to hold and manipulate propositional knowledge in working memory is related to the number of words, complex propositions, and main ideas recorded in notes." (p. 33)

Thus while most note-taking research continues to measure the impact of note-taking on recall as measured by tests, there is increasing emphasis on cognitive analyses that may have more explicit instructional implications in the near future.

References

- Anderson, Thomas H., and Armbruster, Bonnie B. "The value of taking notes during lectures," Technical Report No. 374. Cambridge, Massachusetts: Bolt, Beranek and Newman and Center for the Study of Reading, Urbana, Illinois, 1986. 49pp. [ED 277 996]
- Ash, Philip, and Carlton, Bruce J. "The value of note-taking during film learning," *British Journal of Educational Psychology*, 23, 1953, pp. 121-125.
- Barnett, Jerrold E.; Di Vesta, Francis J.; and Regozinski, James T. "What is learned in note taking?" *Journal of Educational Psychology*, 23, (2), 1981, pp. 181-192.

- Bretzing, Burke H., and Kulhary, Raymond W. "Notetaking and depth of processing," *Contemporary Educational Psychology*, 4 (2), April 1979, pp. 145-153.
- Carrier, Carol A., and Titus, Amy. "Effects of notetaking pretraining and test mode expectations on learning from lectures," *American Educational Research Journal*, 18 (4), Winter 1981, pp. 385-397.
- Carter, John F., and Van Matre, Nicholas H. "Note taking versus note having," *Journal of Educational Psychology*, 67 (6), 1975, pp. 900-904.
- Crawford, C. C. "Some experimental studies of the results of college note taking," *Journal of Educational Research*, 12, 1925, pp. 379-386.
- Denner, Peter R. "Comparison of the effects of episodic organizers and traditional notetaking on story recall," Final Report. Idaho State University, 1986. 36pp. [ED 270 731]
- Di Vesta, Francis J., and Gray, Susan G. "Listening and note taking," *Journal of Educational Psychology*, 63 (1), 1972, pp. 8-14.
- Einstein, Gilles O.; Morris, Joy; and Smith, Susan. "Notetaking individual differences, and memory for lecture information," *Journal of Educational Psychology*, 77 (5), October 1985, pp. 522-532.
- Fisher, Judith L., and Harris, Mary B. "Effect of note-taking preference and type of notes taken on memory," Part 2, *Psychology Reports*, 35 (1), 1974, pp. 384-386.
- Fisher, Judith L., and Harris Mary B. "Effect of note taking and review on recall," *Journal of Educational Psychology*, 65 (3), 1973, pp. 321-325.
- Henk, William A., Stahl, Norman A. "A meta-analysis of the effect of notetaking on learning from lecture." Paper presented at the 34th Annual Meeting of the National Reading Conference, 1985. 15pp. [ED 258 533]
- Howe, Michael J. "Using students' notes to examine the role of the individual learner in acquiring meaningful subject matter," *Journal of Educational Research*, 64 (2), October 1970, pp. 61-63.
- Hult, Richard E., Jr., et al. "Different effects of note taking ability and lecture encoding structure on student learning." Paper presented at the Annual Meeting of the Eastern Educational Research Association, 1984.
- Kiewra, Kenneth A. "Learning from a lecture: An investigation of notetaking, review and attendance at a lecture," *Human Learning*, 4, 1985, pp. 73-77.
- Kiewra, Kenneth A. "Notetaking and review: The research and its implications," *Instruction Science*, 16 (3), 1987, pp. 233-249.
- Kiewra, Kenneth A. "The process of review: A levels of processing approach," *Contemporary Educational Psychology*, 8 (4), October 1983, pp. 366-374.
- Kiewra, Kenneth A., and Benton, Stephen L. "The relationship between information-processing ability and notetaking," *Contemporary Educational Psychology*, 13, 1988, pp. 33-44.
- Kiewra, Kenneth A., and Frank, Bernard M., "Cognitive style: Effects of structure of acquisition and testing," 1985. 23 pp. [ED 261 072]
- King, James R., et al. "Integrating study skills and orientation courses," College Reading and Learning Assistance Technical Report 84-07. Atlanta: Georgia State University Division of Developmental Studies, 1984. 42pp. [ED 248 760]
- Ladas, Harold. "Summarizing research: A case study," *Review of Educational Research*, 50 (4), Winter 1980, pp. 597-624.
- Locke, Edwin A. "An empirical study of lecture note taking among college students," *The Journal of Educational Research*, 77, 1977, pp. 93-97.
- McAndrew, Donald A. "Underlining and notetaking: Some suggestions from research," *Journal of Reading*, 27 (2), November 1983, pp. 103-108.
- McClendon, Paul I. "An experimental study of the relationship between the note-taking practices and listening comprehension of college freshmen during expository lectures," *Speech Monographs*, 25, 1958, pp. 222-228.
- Shaughnessy, Michael F., and Evans, Robert. "The educational psychology of note taking: Effects of prior word/world knowledge." Paper presented at the Annual Meeting of the Rocky Mountain Educational Research Association, 1986. 13pp. [ED 283 217]
- Tomlinson, Louise M. "Group oral review in the reading lab: A means of synthesizing individualized approaches applied to one body of written material." Paper presented at the Developmental Studies Conference, 1985. 11pp. [ED 259 305]



Clearinghouse on Reading and Communication Skills

Indiana University
2805 E. 10th St., Suite 150

Bloomington, IN 47408-2698
(812) 855-5847

Large Scale Writing Assessment

by Holly O'Donnell

A national concern over the decline in students' writing scores (as revealed in National Assessment of Educational Progress reports), serious doubts about what some of those scores signify, and a shift in focus from writing product to writing process in research and classroom practice have each given impetus to the change from indirect measures of writing proficiency (those that use "objective" test items) to direct measures (those that call for student writing samples). In their 1981 national survey, McCready and Melton found that of the twenty-four states claiming to have a writing assessment program, twenty-two require a writing sample as part of the assessment. Only two states rely solely on the use of objective tests.

Large scale writing assessments, however, involve a number of complex issues that are not always evident to decision makers who are not specialists in measurement. In discussing how to and how not to conduct an assessment of student writing, McCaig (1982) warns that "an assessment plan which is incomplete or poorly conceived may produce findings which can be challenged and even dismissed as meaningless by critics who can document flaws in the process." This digest (1) outlines some of the approaches used in the implementation of large scale writing assessments, (2) examines some of the issues and problems surrounding the use of student writing samples, and (3) reports on various trends in state writing assessment projects.

Direct Versus Indirect Assessment

Direct and indirect writing assessments are radically different approaches focusing on different components of writing. Indirect measurements typically use multiple choice tests to assess the student's understanding of mechanics or language conventions: spelling, punctuation, capitalization, grammar, usage, sentence construction, organiza-

	Advantages	Disadvantages
Direct	<ul style="list-style-type: none"> ● extent of information provided about the students' writing proficiency ● fidelity to real world writing tasks ● potential for positive user attitudes ● relatively low test development cost ● high face validity 	<ul style="list-style-type: none"> ● potential lack of uniformity regarding proficiencies assessed ● high cost of scoring
Indirect	<ul style="list-style-type: none"> ● high score reliability ● relatively low scoring cost ● high degree of control over skills tested 	<ul style="list-style-type: none"> ● lack of fidelity to real world writing tasks ● reliance on reading ● lack of face validity

tion, and so on. Direct assessments, on the other hand, assess actual writing performance, since they require the students to produce a writing sample. Spandel and Stiggins (1981) suggest that the two approaches can best be compared in terms of their advantages and disadvantages.

Participants at a conference on assessment issues agreed that the use of writing samples is essential because of the instructional implications (McCready and Melton 1981). That is, if teachers know that students' writing ability will be evaluated by means of a direct measure, they will encourage more writing in the classroom.

Three Approaches to Scoring

Provided that writing assessments are conducted to determine the status of writing in a given

state or school system and provided they are conducted to help improve classroom instruction, several factors need to be considered prior to the collection of writing samples: (1) the educational decisions to be made, on the basis of test results; (2) the writing purpose, audience, and type of writing to be required; and (3) the specific skills or traits to be judged along with the criteria used for evaluating writing performance (Spandel and Stiggins 1981). It must also be remembered that ratings will vary depending upon the scoring procedure used. Quellmalz, in writing about scoring criteria (1982), notes that "criteria employed for evaluation students writing vary along a number of dimensions: from qualitative to quantitative; from general to specific; from comprehensive, full discourse features to isolated features; from vague guidelines to replicable, objective guidelines. "Scoring options range from holistic scoring (general impressionistic marking) to analytic and primary trait scoring.

Holistic Scoring

Holistic scoring of a writing sample is based upon the reader's overall impression of the effectiveness of a piece of writing. Papers are scored by trained raters on a numerical scale, usually a four-point scale. Once the writing samples are collected, the raters or scorers sort the samples into four stacks, relating the quality of the essay only to other papers in the group rather than to a predetermined example of "good" writing. Papers are typically read by two raters, and the scores they assign a writing sample are summed into a total score. If there is a discrepancy of two score points, the score is reconciled by yet a third reader/rater.

Primary Trait Scoring

Primary trait scoring focuses on a specific rhetorical characteristic or trait of a given piece of writing. It is based on the premises that all writing is done in terms of a specific audience and that writing, if successful, will have the desired effect on that audience. Lloyd-Jones (1977) identifies two goals of primary trait scoring: (1) to define what segment of discourse will be evaluated (e.g., explanatory, expressive, persuasive), and (2) to train readers to render holistic judgments accordingly. A scoring guide for primary trait analysis may consist of the exercise itself; a description of the rhetorical traits of the writing; an interpretation of the exercise indicating how each element in the task is expected to affect the student; an interpretation of how the situation of the exercise is related to the primary trait; sample papers that are representative of each score point; and a discussion of why each sample paper was scored as it was (McCready and Melton 1981).

One difference between holistic and primary trait scoring is that with primary trait scoring, students' papers are being measured against external criteria, whereas with holistic scoring, papers are compared with one another.

Analytical Scoring

If primary trait scoring is a situation-specific analysis of writing, analytical scoring is a thorough, trait-by-trait analysis. The identified traits reflect those components of a writing sample that are considered important to any piece of writing in any context. Diederich (1974), the originator of analytical scoring, for example, has identified eight common traits: ideas, organization, wording, flavor (tone), usage, punctuation, spelling, and handwriting. Others may use traits more general such as content, organization, focus and support, and mechanics. If enough components are analyzed, this scoring procedure can provide a comprehensive picture of writing performance. However, the components need to be explicit and well defined so that the raters understand and agree upon the basis for making judgments about the writing sample.

In relating these scoring approaches to classroom applications, Spandel (1981) observes that holistic scoring offers a broad base for a discussion of what makes a piece of writing generally good or bad. Analytical scoring can take this discussion one step further by identifying those traits of components that make a piece of writing effective. And, by being situation-specific, primary trait scoring focuses on the importance of audience to a piece of writing.

Issues and Problems

Essential to the quality of assessment and the value of scoring procedures used are the reliability and validity of the scores generated by the assessment. Specifically, the scoring criteria should be applicable uniformly within a rating session and from one rating session to another. Furthermore, these ratings should correlate with other measures of student writing. Even if the assessment instrument is reliable and valid, spurious scores can result from the development of poor exercises, poor test administration or environment, or poor scoring procedures (Stiggins, Northwest Regional Educational Laboratory 1980). Scorers must understand and agree upon the criteria applied to a piece of writing. Thus, inadequate training of scorers may also influence or skew the results of an assessment.

The choice of topic (or "prompt") to be written is another factor that may influence scores. Students may write more enthusiastically on some topics

than on others, resulting in better quality writing. A student's background and prior knowledge will also affect the "expertise" a student brings to a piece of writing. Or, depending upon the student's interpretation of a writing prompt, he or she may write persuasive discourse in response to a prompt intended for expository discourse.

Time and cost are two other factors that may influence the decision for large scale writing assessment. Stiggins (Northwest Regional Education Laboratory 1980) separates cost factors into those that are developmental and those that are administrative. Developmental costs will vary depending on whether a previously designed assessment instrument is used or a new one developed. If one is to forego the expense of constructing a new scoring instrument, expense will still be incurred for the securing, reviewing, evaluating, and selecting of appropriate exercises and scoring guides that do exist. Administrative costs involve those associated with test administration, the selection of test administrators, the distribution of materials, and the collection of test materials.

Then there are the scoring costs—the time required to train raters and the time required to rate papers. According to data collected by Quellmalz (1982), the training time for holistic and primary trait scoring averages two to four hours, and for analytical scoring averages six to eight hours. Test reuse is another cost factor. Stiggins (Northwest Regional Educational Laboratory 1980) states that "with indirect assessment, the high cost of test construction can be amortized over repeated administration and the recurring scoring costs are very low. However, with direct assessment, although the initial development costs are low, the scoring costs remain high with each use." In a 1982 dissertation Bauer compared the reliabilities and the cost-efficiencies of these three methods of direct assessment. Based on her results, Bauer concluded that the analytical method was the most reliable and the holistic method was the most cost-efficient in grading a large number of essays (ED 225 171).

A 1979 study by Fredrick identified some of the problems that states have encountered with their writing assessment endeavors: (1) arrangements for a place large enough and suitable enough for the scoring, (2) coordinating release time for teachers to act as scorers, (3) adhering to a rigid time schedule during the scoring session, (4) not enough time or money, and (5) finding or designing a variety of writing skill tasks. Her survey concluded with a list of recommendations to others who are planning a writing assessment, some of which are as follows:

- formulate writing objectives and focus research questions before the assessment,
- use language arts specialists to advise on content and to react to items prior to pilot testing,
- clarify traits to be measured,
- include clear and concise directions, and
- use actual performance on practical writing, such as messages, letters, forms and so forth, instead of the proofreading type of assessment found in most multiple choice tests.

Trends in Writing Assessment

A national study conducted in 1981 by McCready and Melton collected data from 42 state departments of education. Of the 22 states using a writing sample, most of the states indicated that they used holistic scoring procedures, with three states using primary trait techniques, one using analytical, and three states using both holistics and analytic scoring. In fact, when comparing their study with the earlier study by Fredrick (1979), McCready and Melton, they found a change in preference from either holistic or primary trait scoring to a use of holistic and analytical methods, which appeared to offer a broader base for determining basic competencies in writing and assessing educational progress.

The May 1984 issue of CAPTRENDS, published by the Center for Performance Assessment, reveals diverse environments for the solicitation of writing samples. Some states used untimed writing sample, while others set 25-minute limit. Some states allowed students to revise their initial drafts, while yet another state offered less skilled writers a number of prewriting suggestions to help them get started.

Large scale writing assessments are useful, but complex. This digest has attempted to identify a few of the issues and problems that need to be addressed in such an endeavor. However, as Spandel and Stiggins conclude in their booklet, *Direct Measures of Writing Skills: Issues and Applications. Revised Edition* (1981), "There is not now, nor will there ever be, a single best way to assess writing skills. Each individual educational assessment and writing circumstance presents unique problems to the developer and use of writing tests. Therefore, great care must be taken in selecting the approach and the methods to be used in each writing assessment. Methods used in one context to measure one state of relevant writing skill should not be generalized to other writing contexts without careful consideration of writing circumstances."

Resources

Center for Performance Assessment. "Accurate Scoring, Quality Writing Prompts Improve State Practices," *CAPTRENDS*, 9 (May 1984): 4-5.

Cronnel, Bruce, and Joan Michael, eds. "Writing: Policies, Problems and Possibilities." Proceedings of a Conference Co-sponsored by SWRL Educational Research and Development and by California State University, Los Alamitos, California, May 1982. [ED 221 872]

Diederich, Paul B. *Measuring Growth in English*. Urbana, Ill.: National Council of Teachers of English, 1974. [ED 097 702]

Fredrick, Vicki, "Writing Assessment Research Report: A National Survey." Madison: Wisconsin State Department of Public Instruction, 1979. [ED 200 988]

Lloyd-Jones, Richard. "Primary Trait Scoring" in *Evaluating Writing, Describing, Measuring, Judging*, edited by Charles Cooper and Lee Odell. Urbana, Ill.: National Council of Teachers of English, 1977. [ED 143 020]

McCaig, Roger A. "How to (and How Not to) Conduct an Assessment of Student Writing." 1982. [ED 229 396]

McCready, Michael A., and Virginia S. Melton. "Feasibility of Assessing Writing Using Multiple Assessment Techniques. Research Report." Ruston: Louisiana Technical University, 1981. [ED 220 871]

Northwest Regional Educational Laboratory. "Writing Assessment for the 1980s. Proceedings of a National Conference of the Assessment of Writing." Boulder, Colorado, 1980. [ED 195 576]

Quellmalz, Edys S. "Designing Writing Assessments: Balancing Fairness, Utility, and Cost." Los Angeles: University of California, Center for the Study of Evaluation, 1982. [ED 228 270]

Spandel, Vicki. *Classroom Applications of Writing Assessment: A Teacher's Handbook*. Portland, Ore.: Northwest Regional Educational Laboratory, Clearinghouse for Applied Performance Testing, 1981. [ED 215 995]

Spandel, Vicki, and Richard J. Stiggins. *Direct Measures of Writing Skill: Issues and Application. Revised Edition*. Portland, Ore.: Northwest Regional Educational Laboratory, Clearinghouse for Applied Performance Testing, 1981. [ED 213 035]

"Written Language and Writing Abilities: Abstracts of Doctoral Dissertations Published in *Dissertation Abstracts International*, July through December 1982 (Vol. 43, Nos. 1 through 6). "Urbana, Ill.: ERIC Clearinghouse on Reading and Communication Skills, 1982. [ED 225 171]



Dialogue Journals

by Jana Staton

Teachers who want to involve every student, even the most reluctant, in a literacy practice which unites reading and writing and encourages thinking and reflection, may want to consider incorporating dialogue journals into their classroom practice. Dialogue journals use writing as a genuine means of communication between each student and the teacher, to get things done in the common life they share in the classroom.

What Is a Dialogue Journal?

A dialogue journal is a bound composition book in which each student carries on a private written conversation with the teacher for an extended period of time (school year, semester). Unlike much school-assigned writing, which is often only for purposes of evaluation, dialogue journals are *functional, interactive*, mostly about *self-generated topics*, and deeply embedded in the continuing life of the classroom. Both persons write to each other in an informal, direct style about topics of mutual interest, usually on a daily basis at elementary level, two or three times a week for older students. In a school year, even primary students can fill several composition books.

Dialogue journals serve as a bridge between natural spoken conversation, with its participants and turns, and the traditional classroom tasks of essay and report writing. They also allow students to develop more coherent self-expression and a personal "voice"—both essential aspects of writing which are often lost when basic composition skills are stressed.

Dialogue journals were developed over many years by a sixth-grade teacher, Leslie Reed, in Los Angeles, to meet several needs—to get to know her students better, to get feedback on lessons, to improve classroom discipline, and to involve each student in meaningful reading and writing. Extensive classroom observations and text analyses of

dialogue journals have been conducted with both native and nonnative speakers of English (Staton 1980; Staton et al. 1987; Kreeft et al. 1985). They are now being used with first- through sixth-graders, with second language learners, with high school and college students in various content areas (Atwell 1984) and with special education populations (Baites et al. 1986).

Some brief excerpts from dialogue journals in Leslie Reed's class are helpful for understanding their conversational, interactive nature.

Gordon: I did terrible on the math homework from last night. Math was totally terrible. I hate math. I really do hate it!

Mrs. R.: Come on! Give yourself a chance. You hate every new math idea and in a couple of days you're saying "I like this—it's easy!" You'll catch on—let me help!

Gordon: That is not true! I did not say that about fractions—did I?

Janinne: I wish I didn't win the Spelling Bee. I know I should be happy about winning but I feel worse than I ever did...I feel very much as if the whole world is against me. Even what I thought were my best of friends. The people I trusted now hate me. Why can't they understand?

Mrs. R.: It is difficult to understand—and I understand and share your weird feelings!...It is most difficult to be a good loser! Somehow being a loser you feel better if you can criticize or "tear down" the winner. The act of destroying the winner makes a poor loser feel better.

Although each entry is brief, from a few sentences to a page in length, the same topics tend to be discussed and elaborated on for several days, creating extended writing opportunities. Such writing works best when teachers understand the need for students to "own" their writing, allowing students to write about whatever concerns or topics they feel

are important on a given day. Students ask questions, complain about lessons, describe what happened on the playground or at home, reflect on why things happen, express personal feelings—in other words, they use written language in all the purposeful ways they use their spoken language.

What Are Some of the Benefits to Students?

Dialogue journals create a one-to-one relationship between student and teacher in which both academic and personal concerns may be discussed. The journals represent a concrete application of Vygotsky's theory that learning of functional human activities occurs first through the learner's cooperative participation in accomplishing tasks with a more experienced partner. What the learner can do with assistance today can be done unaided in the future. By creating a dialogue setting, the teacher supports the student's emerging reading and writing competencies and the acquisition of more complex reasoning skills (Kreeft 1984; Staton 1984).

But dialogue journals are not a method of instruction in specific skills; they provide opportunities to use newly acquired abilities in writing and reading. As with any truly individualized practice, each student benefits in a different way. Research has shown some of the following benefits:

1. Opportunities to engage in reflection about experiences and to think together with an adult about choices, problems, and ideas (Staton 1984).
2. Opportunities to engage in a natural, purposeful way in different kinds of writing—narration, description and argumentation, even poetry (Kreeft et al. 1985; Staton et al. 1987), and to use all the functions of language.
3. Opportunities to read a personalized text—that is, the teacher's written responses—about topics the student has initiated. The teacher's writing may often be more advanced and complex than textbooks that students are assigned to read (Gambrell 1985; Staton 1986).

Teachers of younger children find the dialogues particularly helpful in early stages of literacy instruction. The interactive dialogue, with just a few sentences each day, makes use of the young child's developed competence in oral language, as shown in this dialogue between a child (who is not yet a "reader," according to standardized tests) and her teacher, Marley Casagrande of Fairfax County.

Kelly: I like the little red hen and Dick and Jane. I have problems some times Well I have this problem it is I am not very good on my writing.

Mrs. C.: I think you are a good writer. Keep on trying. I like the Little Red Hen, too, Kelly. Keep on writing!

Kelly: Oh kay. Do you have a problem. if you do I will help you and what are you going to be for Halloween.

Mrs. C.: I am going to be a farmer. I will wear overalls and a straw hat. Everybody has problems, Kelly. Some problems are big and some are small. One of my small problems is I can't stop eating chocolate when I see it.

Studies also show that the more reluctant and least proficient writers are motivated to write in dialogue journals, and that this motivation can transfer to other writing tasks (Hays and Bahruth 1985). Over time, student entries increase in length, become more fluent, and show greater competency in focusing on a topic and elaborating on it (Staton et al. 1986).

For the ESL learner, there is an added benefit to this daily, continuous conversation: the teacher's responses provide clear, comprehensible language for students to absorb subconsciously as a model for language acquisition (Kreeft et al. 1985). Teachers become competent at writing to an optimally challenging level for each student, varying their language to ensure comprehension (Kreeft et al. 1985)

Students have their own way of explaining the benefits of dialogue journals to themselves:

The worksheets make you answer questions, but the dialogue journals makes me ask the questions, and then the teacher helps me think about possible answers. (Staton 1984)

What About the Time It Takes?

Incorporating dialogue journals into a teacher's daily schedule does take time, but that time is also useful for planning the next day's lessons, based in part on the information the dialogue journals provide. Teachers find that they enjoy responding in the journals and look forward to this time.

A second major benefit for teachers is that the dialogue journals seem to improve classroom management and discipline. The journals are a long-range technique for helping individual students learn how to manage their own actions. Teachers report that the individual dialogues help them reach students who are discipline problems or are often absent.

Dialogue, a newsletter on dialogue journals, is available from CLEAR (Center for Language Education and Research at the Center for Applied Linguistics), 1118 22nd Street NW, Washington, DC 20037. The list of several handbooks on the subject is now available (Baitea et al. 1986).

References

- Atwell, Nancie. "Writing and Reading Literature from the Inside Out." *Language Arts* 61 (March 1984): 240-52.
- Baites, Cindy, Susan Searls, Jean C. Slobodzian, and Jana Staton. *It's Your Turn Now! Using Dialogue Journals with Deaf Students*. Washington, D.C.: Gallaudet Pre-College Program, 1986.
- Davis, Frances. "Why You Call Me Emigrant?: Dialogue Journal Writing with Migrant Youth." *Childhood Education* 60 (Nov./Dec. 1983): 110-11, 114-16.
- Gambrell, Linda B. "Dialogue Journals: Reading-Writing Interaction." *The Reading Teacher* 38 (February 1985): 512-15.
- Hayes, Curtis W., and Robert Bahruth. "Querer es poder." in *Breaking Ground: Teachers Relate Reading and Writing in the Elementary School*, ed. J. Hansen, T. Newkirk, and D. Graves. Portsmouth, N.H.: Heinemann, 1985.
- Kreeft, Joy, Roger Shuy, Jana Staton, Leslie Reed, and Robby Morray. *Student-Teacher Interactive Writing in the Learning of English as a Second Language*. Final Report to the National Institute of Education, 1985. ED 252 097.
- Kreeft, Joy. "Dialogue Writing: Bridge from Talk to Essay Writing." *Language Arts* 61 (February 1984): 141-50.
- Staton, Jana. "Writing and Counseling: Using a Dialogue Journal." *Language Arts* 57 (May 1980): 514-18.
- _____. "Thinking Together: Language Interaction in Children's Reasoning." In *Speaking and Writing, K-12: Classroom Strategies and the New Research*, ed. C. Thaiss and C. Suhor. Urbana, IL: National Council of Teachers of English, 1984. ED 247 607.
- _____. "Using Dialogue Journals for Developing Thinking, Reading, and Writing with Hearing-Impaired Students." *Volta Review* 87 (1985): 127-154.
- _____. "The Teacher as a Reading Text." *Greater Washington Reading Council Journal* 11, 1986.
- Staton, Jana, Roger Shuy, Joy Kreeft, and Leslie Reed. *Dialogue Journal Communication: Classroom, Linguistic, Social, and Cognitive Views*. Norwood, NJ: Ablex, 1987. ED 214 196.



Assessing Listening and Speaking Skills

by Nancy A. Mead and Donald L. Rubin

Why Teach and Assess Listening and Speaking Skills?

Even though many students have mastered basic listening and speaking skills, some students are much more effective in their oral communication than others. And those who are more effective communicators experience more success in school and in other areas of their lives. The skills that can make the difference between minimal and effective communication can be taught, practiced, and improved.

The method used for assessing oral communication skills depends on the purpose of the assessment. A method that is appropriate for giving feedback to students who are learning a new skill is not appropriate for evaluating students at the end of a course. However, any assessment method should adhere to the measurement principles of reliability, validity, and fairness. The instrument must be accurate and consistent, it must represent the abilities we wish to measure, and it must operate in the same way with a wide range of students. The concerns of measurement, as they relate to oral communication, are highlighted below. Detailed discussions of speaking and listening assessment may be found in Powers (1984), Rubin and Mead (1984), and Stiggins (1981).

How Are Oral Communication and Listening Defined?

Defining the domain of knowledge, skills, or attitudes to be measured is at the core of any assessment. Most people define oral communication narrowly, focusing on speaking and listening skills separately. Traditionally, when people describe speaking skills, they do so in a context of public speaking. Recently, however, definitions of speaking have been expanded (Brown 1981). One trend has been to focus on communication activities that reflect a variety of settings: one-to-many, small

group, one-to-one, and mass media. Another approach has been to focus on using communication to achieve specific purposes: to inform, to persuade, and to solve problems. A third trend has been to focus on basic competencies needed for everyday life—for example, giving directions, asking for information, or providing basic information in an emergency situation. The latter approach has been taken in the Speech Communication Association's guidelines for elementary and secondary students. Many of these broader views stress that oral communication is an *interactive* process in which an individual alternately takes the roles of speaker and listener, and which includes both verbal and non-verbal components.

Listening, like reading comprehension, is usually defined as a receptive skill comprising both a physical process and an interpretive, analytical process. (See Lundsteen 1979 for a discussion of listening.) However, this definition is often expanded to include critical listening skills (higher-order skills such as analysis and synthesis) and nonverbal listening (comprehending the meaning of tone of voice, facial expressions, gestures, and other nonverbal cues.) The expanded definition of listening also emphasizes the relationship between listening and speaking.

How Are Speaking Skills Assessed?

Two methods are used for assessing speaking skills. In the *observational* approach, the student's behavior is observed and assessed unobtrusively. In the *structured* approach, the student is asked to perform one or more specific oral communication tasks. His or her performance on the task is then evaluated. The task can be administered in a one-on-one setting—with the test administrator and one student—or in a group or class setting. In either setting, students should feel that they are communicating meaningful content to a real audience. Tasks

should focus on topics that all students can easily talk about, or, if they do not include such a focus, students should be given an opportunity to collect information on the topic.

Both observational and structured approaches use a variety of rating systems. A *holistic* rating captures a general impression of the student's performance. A *primary trait* score assesses the student's ability to achieve a specific communication purpose—for example, to persuade the listener to adopt a certain point of view. *Analytic* scales capture the student's performance on various aspects of communication, such as delivery, organization, content, and language. Rating systems may describe varying degrees of competence along a scale or may indicate the presence or absence of a characteristic.

A major aspect of any rating system is rater objectivity: Is the rater applying the scoring criteria accurately and consistently to all students across time? The reliability of raters should be established during their training and checked during administration or scoring of the assessment. If ratings are made on the spot, two raters will be required for some administrations. If ratings are recorded for later scoring, double scoring will be needed.

How Are Listening Skills Assessed?

Listening tests typically resemble reading comprehension tests except that the student listens to a passage instead of reading it. The student then answers multiple-choice questions that address various levels of literal and inferential comprehension. Important elements in all listening tests are (1) the listening stimuli, (2) the questions, and (3) the test environment.

The listening stimuli should represent typical oral language, and not consist of simply the oral reading of passages designed to be written material. The material should model the language that students might typically be expected to hear in the classroom, in various media, or in conversations. Since listening performance is strongly influenced by motivation and memory, the passages should be interesting and relatively short. To ensure fairness, topics should be grounded in experience common to all students, irrespective of sex and geographic, socioeconomic, or racial/ethnic background.

In regard to questions, multiple-choice items should focus on the most important aspects of the passage—not trivial details—and should measure skills from a particular domain. Answers designated as correct should be derived from the passage, without reliance on the student's prior knowledge or experience. Questions and response choices

should meet accepted psychometric standards for multiple-choice questions.

An alternative to the multiple-choice test is a performance test that requires students to select a picture or actually perform a task based on oral instruction. For example, students might hear a description of several geometric figures and choose pictures that match the description, or they might be given a map and instructed to trace a route that is described orally.

The testing environment for listening assessment should be free of external distractions. If stimuli are presented from a tape, the sound quality should be excellent. If stimuli are presented by a test administrator, the material should be presented clearly, with appropriate volume and rate of speaking.

How Should Assessment Instruments Be Selected or Designed?

Identifying an appropriate instrument depends upon the purpose for assessment and the availability of existing instruments. If the purpose is to assess a specific set of skills—for instance, diagnosing strengths and weaknesses or assessing mastery of an objective—the test should match those skills. If appropriate tests are not available, it makes sense to design an assessment instrument to reflect specific needs. If the purpose is to assess communication broadly, as in evaluating a new program or assessing district goals, the test should measure progress over time and, if possible, describe that progress in terms of external norms, such as national or state norms. In this case, it is useful to seek out a pertinent test that has undergone careful development, validation, and norming, even if it does not exactly match the local program.

Several reviews of oral communication tests are available (Rubin and Mead 1984). The Speech Communication Association has compiled a set of *Resources for Assessment in Communication*, which includes standards for effective oral communication programs, criteria for evaluating instruments, procedures for assessing speaking and listening, an annotated bibliography, and a list of consultants.

Conclusions

The abilities to listen critically and to express oneself clearly and effectively contribute to a student's success in school and later in life. Teachers concerned with developing the speaking and listening communication skills of their students need methods for assessing their students' progress. These techniques range from observation and questioning to standardized testing. However, even the most informal methods should embrace the mea-

surement principles of reliability, validity, and fairness. The methods used should be appropriate to the purpose of the assessment and make use of the best instruments and procedures available.

References

Brown, Kenneth L. *Teaching, Speaking and Listening Skills in the Elementary and Secondary School*. Boston, MA: Massachusetts Department of Education, 1981. ED 234 440.

Lundsteen, Sara W. *Listening: Its Impact on Reading and the Other Language Arts*. Revised ed. Urbana, IL: National Council of Teachers of English and the ERIC Clearinghouse on Reading and Communication Skills, 1979. ED 169 537.

Powers, Donald E. *Considerations for Developing Measures of Speaking and Listening*. New York: College Entrance Examination Board, 1984.

Rubin, Don. L., and Mead, Nancy A. *Large Scale Assessment of Oral Communication Skills: Kindergarten through Grade 12*. Annandale, VA: Speech Communication Association and the ERIC Clearinghouse on Reading and Communication Skills, 1984. ED 245 293.

Speech Communication Association. *Resources for Assessment in Communication*. Annandale, VA.: Speech Communication Association, 1984.

_____. *SCA Guidelines: Essential Speaking and Listening Skills for Elementary School Students (6th Grade Level)*. Annandale, VA.: Speech Communication Association. (Pamphlet, 1984).

_____. *SCA Guidelines: Speaking and Listening Competencies for High School Graduates*. Annandale, VA.: Speech Communication Association. (Pamphlet, 1984).

Stiggins, Richard J., ed. *Perspectives on the Assessment of Speaking and Listening Skills for the 1980s*. Portland, OR: Clearinghouse for Applied Performance Testing, Northwest Regional Educational Laboratory, 1981. ED 210 748.

Introduction to FAST Bibs

Two types of citations are included in these annotated bibliographies—citations of ERIC documents and citations of journal articles. The distinction between the two is important only if you are interested in obtaining the full text of any of these items. To obtain the full text of ERIC documents, you will need the ED number given in square brackets following the citation. For approximately 98% of the ERIC documents, the full text can be found in the ERIC microfiche collection. This collection is available in over 800 libraries across the country. Alternatively, you may prefer to order your own copy of the document from the ERIC Document Reproduction Service (EDRS). You may contact EDRS by writing to 7420 Fullerton Road, Suite 110, Springfield, VA 22153-2852, or by telephoning them at (800) 443-ERIC (3742) or (703) 440-1400. For those few ERIC documents which are not available by these means, information regarding their availability is provided in the square brackets.

Full text copies of journal articles are not available in the ERIC microfiche collection or through EDRS. Articles can be acquired most economically from library collections or through interlibrary loan. Articles from some journals are also available through University Microfilms International at (800) 732-0616 or through the Original Article Tearsheet Service of the Institute for Scientific Information at (800) 523-1850.



Strengthening Test-Taking and Study Strategies in Reading

by Jerry Johns and Susan J. Davis

Tests of all kinds are becoming more prevalent in schools today. Most students take a battery of classroom, achievement, and competency tests each year. Since educational decisions are often made on the basis of test results, it is essential that test data are valid indicators of student performance. Students who have poor test-taking skills, however, may not have test scores that reflect their actual performance.

This *FAST Bib* addresses the issue of teaching test-taking and study skills to students from the elementary through the secondary grades. The first section begins with an overview of programs and practices that have been used to teach test-taking skills. The second section presents citations of recent research on test-taking and study strategies, concentrating on studies that indicate strategies that can be effectively taught. The final section reports strategies that can be used by teachers, counselors, or parents to help students improve their study skills and test-taking ability.

Overview

Brueggemann, Louis V. "What Teachers Should Know about Test Wiseness," *Reading Horizons*, v27 n3 p159-63 Apr 1987.

Reviews research dealing with test wiseness and concludes that teachers and others who administer tests and those who review results should consider the degree to which test-wisness characteristics might have been operative had a planned effort been undertaken to provide special instruction.

Koenke, Karl. "ERIC/RCS: Test Wiseness," *Journal of Reading*, v31 n5 p480-83 Feb 1988.

Provides a description of a variety of programs that teach test wiseness. Discusses problems and concerns of using test-wisness programs.

Prell, Jo Ann; Prell, Paul. "Improving Test Scores—Teaching Test-Wisness." Center on Evaluation

and Research, Phi Delta Kappa, Bloomington, IN 1986. 5p. [ED 280 900]

Reviews practices commonly used to improve test scores. Discusses advantages of teaching students to take tests and gives suggestions on ways to teach test wiseness.

Recent Research

Benson, Jeri; and others. "Effects of Test-Wisness Training and Ethnicity on Achievement of Third- and Fifth-Grade Students," *Measurement and Evaluation in Counseling and Development*, v18 n4 p154-62 Jan 1986.

Determines whether test-wisness training influences the achievement of students in math and reading. Reports significant effects in math for fifth-grade students and race effects favoring white students.

Berliner, David; Casanova, Ursula. "Should Students Be Made Test-Wise?" *Instructor*, v95 n6 p22-23 Feb 1986.

Shows that most students who received test-wisness training scored much higher than did students of equal ability who had no training. Finds that familiarity with the test format, the test-taking situation, and the conventions of the test contribute to good performance.

Christen, William L.; Murphy, Thomas J. "Learning How to Learn: How Important Are Study Skills?" *NASSP Bulletin*, v69 n483 p82-88 Oct 1985.

Surveys 479 graduating seniors from three different high schools. Reveals that the majority of the students were not adequately trained in study skills. Includes a copy of the survey questionnaire.

Dolly, John; Williams, Kathy. "Teaching Testwisness." Paper presented at the Annual meeting of the Northern Rocky Mountain Educational Research Association, 1983. 15p. [ED 241 562]

Describes approaches used that may maximize guessing on multiple-choice exams. Discusses studies in which test wiseness was taught by using logical reasoning procedures that maximized guessing.

Feeley, Joan T.; Wepner, Shelley B. "Does Prior Knowledge Affect College Students' Performance on a State-Developed Reading Competency Test?" Paper presented at the Annual Meeting of the College Reading Association, 1985. 17p. [ED 262 384]

Conducts a study (1) to determine the effects of direct exposure to the topics of the selections in the New Jersey College Basic Skills Placement Test (NJCBSPT) on their posttest scores; and (2) to investigate whether students exposed to the topics would indicate awareness of this knowledge on a teacher-made-measure—the Prior Knowledge Inventory (PKI). Concludes that treatment did not increase scores, but the reading program was beneficial for both groups.

Halpin, Gerald; and others. "Effects on Stanford Achievement Test Scores of Teaching Content versus Test-Taking Strategies." Paper presented at the Annual Meeting of the Mid-South Educational Research Association, 1987. 13p. [ED 291 784]

Reports a study of first-grade students conducted to determine if a program designed to develop test-taking skills would result in higher standardized achievement test scores than would one focusing on the content assessed by the test. Finds that instructing students in test wiseness is as effective as intensive instruction in content.

Nolte, Ruth Yopp; Singer, Harry. "Active Comprehension: Teaching a Process of Reading Comprehension and Its Effects on Reading Achievement," *Reading Teacher*, v39 n1 p24-31 Oct 1985.

Concludes that teaching fourth- and fifth-grade children to ask themselves questions about key points in a story significantly improved their performance on tests about story content.

Perlman, Carole L.; and others. "Should They Read the Questions First? A Comparison of Two Test-Taking Strategies for Elementary Students." Paper presented at the Annual Meeting of the American Educational Research Association, 1988. 15p. [ED 296 004]

Studies the usefulness of before-adjunct questions with standardized multiple-choice tests in

increasing reading comprehension scores by examining the relative effectiveness of reading test questions first or reading the passage first. Reports a slight trend indicating that those who read the questions first outperformed the others on literal comprehension items, but the results were not conclusive. Stresses that it would not be appropriate to generalize these results beyond the 210 fourth graders in the study.

Powers, Stephen. "The Effect of Testwiseness on the Reading Achievement Scores of Minority Populations. Final Report." National Institute of Education, Washington, DC. 1982. 98p. [ED 222 549]

Investigates the effect of testwiseness on four ethnic populations: Black, Hispanic, Native American, and Anglo. Finds that students instructed in test wiseness had comparable gains on reading tests and that no ethnic group had a significantly different amount of testwiseness once reading ability and socioeconomic levels were controlled.

Scruggs, Thomas; and others. "An Analysis of Children's Strategy Use on Reading Achievement Tests," *Elementary School Journal*, v85 n4 p479-84 Mar 1985.

Analyzes the results of previous studies of teaching test-taking skills to elementary students. Concludes that training is more effective for upper-elementary grades than lower-elementary grades and that the longer training programs are more effective.

Scruggs, Thomas E.; and others. "Learning Disabled Students' Spontaneous Use of Test-Taking Skills on Reading Achievement Tests," *Learning Disability Quarterly*, v8 n3 p205-10 Sum 1985.

Reports a study of third graders who were administered items from reading achievement tests and interviewed concerning strategies they employed and their level of confidence in each answer. Results indicated that LD students were less likely to report use of appropriate strategies on inferential questions and to attend carefully to specific format demands and that LD students reported inappropriately high levels of confidence.

Scruggs, Thomas; and others. "Teaching Test-Taking Skills to Elementary-Grade Students: A Meta-Analysis," *Elementary School Journal*, v87 n1 p69-82 Sep 1986.

Reports an investigation of the strategies of 31 elementary school students in answering reading questions from a standardized test. Notes that students use specific strategies and

suggests that test results can be improved by teaching those strategies.

Wilhite, Stephen C. "Multiple-Choice Test Performance: Effects of Headings, Questions, Motivation, and Type of Retention Test Question." Paper presented at the Annual Meeting of the American Educational Research Association, 1986. 32p. [ED 271 736]

Examines the effect of headings and adjunct questions embedded in an expository text on the delayed multiple-choice test performance of 88 undergraduate students enrolled in psychology courses. Suggests that the appearance of any headings in the text may simply induce in subjects a strategy of trying to organize and interrelate the concepts in the text, and this strategy may then be applied to all sections of the passage regardless of whether they are preceded by a heading.

Teaching Strategies

Allen, Sheila. "Conversing about Study Skills," *Highway One*, v9 n3 p34-41 Fall 1986.

Suggests ways of diagnosing problems in students' study habits and offers strategies for improving study skills and test-taking strategies.

Ellis, David B. "Becoming a Master Student." 1985. 343p. [ED 272 075]

Offers a guide to support student success in extended orientation courses, freshman seminars, and study skills classes using exercises such as journal-keeping, stories of 12 people who have mastered specific skills, practical suggestions, and forms and charts. Includes the following topics: time management, memory, reading, note-taking, test-taking, creativity, health, relationships, money management, and use of resources.

Gordon, Belita. "Teach Them to Read the Questions," *Journal of Reading*, v26 n2 p126-32 Nov 1982.

Suggests strategies teachers can offer students to help them understand test questions. Strategies require students to think about both the question and what could be in the passage.

Help Your Child Improve in Test-Taking. Office of Educational Research and Improvement, Washington, DC. 1987. 5p. [ED 280 899]

Describes techniques for developing children's ability to take tests. Provides suggestions for parents, check lists for reducing test anxiety, preparing for tests, taking tests, judging

a child's progress, and encouraging good study habits.

"Study Skills: A Ready Reference for Teachers." Hawaii State Department of Education, Honolulu. 1988. 315p. [ED 297 276]

Provides practical strategies for teaching a wide range of study skills at the elementary and secondary grade levels. Presents an overview of study skills and strategies for various content areas and grade levels. Discusses guidelines for developing a study skills program, and includes a sample skills continuum chart, student self-assessment checklist, and teacher observation classroom checklist. Provides descriptions of strategies and sample applications for the following areas: (1) study habits; (2) listening skills; (3) reading skills; (4) vocabulary skills; (5) media utilization skills; (6) note-taking/outlining skills; (6) research skills; and (7) test-taking skills.

Integrating Learning and Testing: A Handbook for Teachers, Grade Six. Experimental Edition. 1985 Revision. New York City Board of Education, Brooklyn, N.Y. 1985. 276p. [ED 282 902]

Discusses testing and the testing program in New York State; (2) assists teachers and supervisors in planning and implementing an instructional test-taking program; (3) provides sample lessons that identify and explain test-taking skills, provide performance objectives, outline lesson activities, provide for follow-ups in several test formats, and provide practice tests; (4) develops cognitive skills, and (5) enables students to understand the format of tests.

Ritter, Shirley; Idol-Maestas, Lorna. "Teaching Middle School Students to Use a Test-Taking Strategy," *Journal of Educational Research*, v70 n6 p350-57 Jul-Aug 1986.

Suggests the SCORER learning strategies approach to teaching middle school students to take tests: Schedule, Clue, Omit, Read, Estimate, and Review. Results of SCORER use are discussed.



Reading and Writing Assessment in Middle and Secondary Schools

by **Jerry Johns and Peggy VanLeirsburg**

The increased emphasis on accountability at the national, state, and local levels requires educators to become more knowledgeable in the area of assessment. This *FAST Bib*, based on entries from the ERIC database, contains selected references from 1986 through 1989. The bibliography is organized into six sections: Overview, National Assessment of Educational Progress (NAEP)/ State-Mandated Testing, Standardized Tests, Informal Measures, Special Populations, and Content Area Assessment. The research and opinions contained in these citations are intended to help school personnel gain current information for reading and writing assessment in middle and secondary schools.

Overview

Hancock, Maxine. *Teaching and Evaluating Reading in the Senior High School. A Monograph to Accompany Reading 10*. 1988. 160p. [ED 293 110]

Provides background material as well as suggestions for implementing the Reading 10 program (a Canadian developmental reading course in secondary schools), which was designed to improve students' strategies for learning from text. Deals with structural, philosophical, and practical aspects of the Reading 10 course. Concludes with a report, Learning to Learn from Text: A Framework for Improving Classroom Practice.

Singer, Harry; Balow, Irving H. *Proficiency Assessment and Its Consequences. Final Report*. 1987. 82p. [ED 290 127]

Presents findings of several comparative and experimental studies that investigated three aspects of California's 1980 proficiency assessment: tests, remedial courses, and changes in implementation of the law. Offers recommendations to help school district proficiency programs result in more economical, more equitable, and higher quality education.

Willinsky, John; Bobie, Allen. *When Tests Dare to Be Progressive: Contradictions in the Classroom*. 1986. 16p. [ED 278 964]

Comments on statewide competency testing as a high school graduation requirement that represents a threat to those who encourage broad notions of reading and writing, even when some of the testing innovations in reading and writing mean a step forward in education. Concludes that the compulsion of exam preparation remains a major source of distortion that can render even the most promising approach a rote and remote exercise.

National Assessment of Educational Progress (NAEP)/State-Mandated Testing

Auchter, Joan Chikos; Patience, Wayne. *Decentralized Large Scale Essay Scoring: Methods for Establishing and Evaluating Score Scale Stability and Reading Reliability*. 1989. 41p. [ED 307 321]

Describes methods used by the General Educational Development Testing Services (GEDTS) to establish and maintain score stability and reading reliability on its direct assessment of writing. Illustrates importance of training readers and monitoring sites.

Beaton, Albert E. *Sampling Design for the 1990 Trial State Assessment Program*. 1989. 9p. [ED 306 298]

Raises questions about differences across states in sampling and administration of the trial state assessment program into the design of the 1990 NAEP.

Ferrara, Steven; and others. *Local Assessment Responses to a State-Mandated Minimum-Competency Testing Program: Benefits and Drawbacks*. 1988. 31p. [ED 294 892]

Describes assessment activities of four school districts in Maryland designed to parallel a state-mandated competency-testing program required for high school graduation and to report uses of

scores and positive and negative impacts from assessment activities. Finds that: (1) teachers were enthusiastic about participating in item development and essay scoring; (2) increased emphasis on basic skills objectives, to the detriment of other learning outcomes, was exacerbated by parallel assessments; and (3) further consideration should be given to state involvement in the development and administration of competency tests.

Goldberg, Gail Lynn; Walker-Bartnick, Leslie. *Designing a Review and Appeal Process for a Large Scale Writing Assessment Program*. 1989. 21p. [ED 308 219]

Evaluates a pilot project of large-scale direct assessment of writing, the Maryland Writing Test (MWT). Reports data from 1987 and 1988 to indicate that MWT scores have a high degree of validity.

Kirsch, Irwin S.; Jungeblut, Ann. *Literacy: Profiles of America's Young Adults*. 1986. 79p. [ED 275 692]

Describes the 1985 NAEP assessing literacy skills of America's young adults. Finds that while the overwhelming majority of young adults adequately perform tasks at the lower levels on three literacy scales (prose, document, and quantitative literacy), a sizeable number of young adults appear unable to do well on tasks of moderate complexity.

Standardized Tests

Caldwell, JoAnne. *Test Review: Reading Style Inventory*, *Journal of Reading*, v30 n5 p440-44 Feb 1987.

Concludes that the test has basic problems in construction, interpretation, validity, and reliability.

Canney, George. *Metropolitan Achievement Tests (MAT6) Reading Diagnostic Tests (Test Review)*, *Journal of Reading*, v33 n2 p148-50 Nov 1989.

Reviews the Reading Diagnostic Tests which form part of the battery of survey and diagnostic Metropolitan Achievement Tests. Finds the tests to be an impressive tool for diagnosing the reading strengths and weaknesses of elementary and junior high students.

Cooter, Robert B., Jr. *Gates-MacGinitie Reading Tests, Third Edition. Levels 5/6, 7/9, and 10/12 (Test Review)*, *Journal of Reading*, v32 n7 p656-58 Apr 1989.

Reviews the third edition of this widely used assessment instrument. Concludes that the test is reliable, quick and easy to administer, and that

the publishers provide many special services. Lists liabilities as lack of validity evidence, omission of reading and study skills, and lack of distinctions among different types of reading comprehension.

Loyd, Brenda H.; Steele, Jeannie L. *Assessment of Reading Comprehension: A Comparison of Constructs*, *Reading Psychology*, v7 n1 p1-10 1986.

Investigates whether standardized tests measure the same comprehension construct as free recall assessment techniques.

Informal Measures

Duffelmeyer, Frederick A.; Duffelmeyer, Barbara Blakely. *Main Idea Questions on Informal Reading Inventories*, *Reading Teacher*, v41 n2 p162-66 Nov 1987.

Notes the problem that comprehension questions that claim to assess students' skills in finding main ideas may in fact be measuring their skill at identifying the topic of a passage.

Flint-Ferguson, Janis; Youga, Janet. *Making Evaluation a Part of the Learning Process*, *Journal of Reading*, v31 n2 p140-45 Nov 1987.

Lists suggestions for alternative methods of evaluation that will bring teaching and evaluation methods into close correspondence (as opposed to following creative teaching with a memorization test). Contends methods of evaluation should become part of the learning process, not just measure recall of information given by the teacher.

Fuchs, Lynn S.; and others. *The Validity of Informal Reading Comprehension Measures*, *Remedial and Special Education (RASE)*, v9 n2 p20-28 Mar-Apr 1988.

Assesses the criterion, construct, and concurrent validity of four informal reading comprehension measures (question answering tests, recall measures, oral passage reading tests, and cloze techniques) with 70 mildly and moderately retarded middle and junior high school boys. Indicates that the correct oral reading rate score demonstrated the strongest criterion validity.

Olson, Mary W.; Gillis, M. K. *Test Type and Text Structure: An Analysis of Three Secondary Informal Reading Inventories*, *Reading Horizons*, v28 n1 p70-80 Fall 1987.

Suggests that informal reading inventories (IRIs) should include both narrative and expository passages. Describes a study of several reading inventories indicating that some current secondary school IRIs have been constructed

with some consistency of text types, but failed to reveal a clear picture of text structure for the inventories.

Royer, James M.; and others. *The Sentence Verification Technique: A Practical Procedure for Testing Comprehension*, *Journal of Reading*, v30 n5 p414-22 Feb 1987.

Introduces a technique for comprehension assessment that allows teachers who have had only a moderate amount of training to develop tests that are valid, reliable, and interpretable. Notes that the procedure can be based on any text without an extended tryout and revision process.

Special Populations

Bender, Timothy A.; Hom, Harry L., Jr. *Individual Differences in Achievement Orientation and Use of Classroom Feedback*. 1988. 18p. [ED 298 156]

Compares individual differences in achievement orientation with differences in gifted students' use of feedback on a classroom exam. Finds that differences in motivational orientation were related to post-test performance on the Motivational Orientation Scale and the students' use of feedback.

Gomez, Mary Louise. *Testing Policies and Procedures for the At-Risk Student Program Area*. 1986. 41p. [ED 304 454]

Describes the testing procedures for the At-Risk Student Program Area, part of the National Center on Effective Secondary Schools, to determine how these secondary students are affected by special programs. Uses data to: (1) help inform program designers, teachers, and administrators about the effects of special programs; (2) highlight the skills and weaknesses of students within a program; and (3) allow researchers to compare and contrast programs.

Noble, Christopher S.; and others. *Omit Rates on Criterion-Referenced Tests for Different Ethnic Groups: Implications for Large Scale Assessment*. 1986. 14p. [ED 278 679]

Examines the relationship between item omission and item position on criterion-referenced tests in the Texas state assessment program. Provides information for framing test administration procedures in such a way that students from any particular ethnic group are not unfairly penalized.

Plato, Kathleen; and others. *A Study of Categorical Program Participation of Chapter 1 Students*. 1986. 157p. [ED 293 958]

Reviews the extent to which students served by Chapter 1 also received services from other categorical programs. Finds that: (1) children served in two programs are usually served in two different subjects; (2) Chapter 1 migrant students are more likely served by more than one program than Chapter 1 regular students; (3) multiply-served students scored lower in reading and mathematics than did singly-served students; (4) there is a dramatic decrease in special program services in grades 8 and 10 even though test scores at those grades show that students do not have a decreased need for such services; (5) students served in categorical programs are older and more likely male than students not served; (6) multiply-served students tend to be older than singly-served students; (7) Hispanics dominate the Chapter 1 migrant population, and Asians dominate the bilingual population; (8) self-reported absentee rates among special program students do not differ from those of the general population; (9) special program students are less likely to have preschool experiences or day care than the general population; (10) evidence of behavioral problems were present in the records of both the singly- and multiply-served child; and (11) students served by one special program appear to be experiencing only moderate academic difficulty; multiple services were reserved for the most seriously troubled students.

Content Area Assessment

Anderson, Thomas H.; Huang, Shang Cheng Chiu. *On Using Concept Maps to Assess the Comprehension Effects of Reading Expository Text*. Technical Report No. 483. 1989. 35p. [ED 310 368]

Uses concept maps to measure knowledge after reading expository text. Finds that subjects, 131 eighth-graders, scored better on a mapping test than a short answer test. Notes that mapping test scores correlate with classroom grades and standardized measures of achievement.

Brownson, Jean. *Using Knowledge to Build Knowledge: The Thematic Approach to Content Reading*. 1988. 11p. [ED 292 628]

Addresses the problem that lack of conceptual knowledge of some children may contribute to difficulty understanding content texts. Suggests strategies and activities designed to develop skills, strategies, and interest in reading.

Tobias, Sigmund. Mandatory Text Review and Interaction with Student Characteristics, *Journal of Educational Psychology*, v79 n2 p154-61 Jun 1987.

Studies students who were randomly assigned to read a text passage displayed on microcomputers in one of four conditions: (1) required reviewing of main text; or (2) alternate text when responses to adjunct questions were incorrect; (3) reading with adjunct questions; and (4) reading without adjunct questions.



Informal Reading Inventories

By Jerry Johns and Peggy VanLeirsburg

Informal reading inventories (IRIs) have been used for nearly half a century to help assess students' reading. Thus, the ERIC database contains numerous citations relating to IRIs. The citations in this *FAST Bib* were selected specifically to help professionals understand the history of, the uses of, and the issues surrounding IRIs. The major sections of this bibliography are: Overview, General Uses, Critiques and Issues, Validity and Reliability Research, and Special Populations. Abstracts for some of the items cited here have been abbreviated to allow for the inclusion of additional citations.

Overview

Demos, E. S. "Evaluation/Testing Procedures in Reading," *Reading Horizons*, v27 n4 p254-60 Sum 1987.

Discusses the evaluation and testing procedures schools use to evaluate and test reading achievement. Identifies three major categories of tests: achievement/survey, diagnostic, and IRIs.

Henk, William A. "Reading Assessments of the Future: Toward Precision Diagnosis," *Reading Teacher*, v40 n9 p860-70 May 1987.

Concludes that standard reading inventories may be made more useful by modifying them to assess the specific abilities and needs of disabled readers. Offers suggestions for making modifications.

Johns, Jerry L.; Lunn, Mary K. "The Informal Reading Inventory: 1910-1980," *Reading World*, v23 n1 p9-19 Oct 1983.

Traces the origin and development of the IRI and discusses its future as an assessment tool.

Johnson, Marjorie Seddon; and others. *Informal Reading Inventories*, second edition. Reading Aids Series, IRA Service Bulletin. International Reading Association, Newark, DE. 1987. 164p. [ED 277 993; for the first edition, see ED 072 437]

Presents a comprehensive description of the use of IRIs and provides teachers and reading specialists with practical strategies for forming

diagnostic impressions that are useful for planning reading instruction. Argues that the best IRIs evaluate reading through procedures that are as close as possible to natural reading activities and that there should be a close fit between assessment and instructional materials.

Pumfrey, Peter D. *Reading: Tests and Assessment Techniques*, second edition. United Kingdom Reading Association Teaching of Reading Monograph Series. International Reading Association, Newark, DE. 1985. 354p. [ED 298 448]

Describes various types of reading tests and assessment techniques. Outlines a strategy for selecting instruments. Includes a chapter on IRIs and oral miscue analysis. Concludes with an annotated bibliography of recent publications on the identification and alleviation of reading difficulties.

Searls, Evelyn F. "What's the Value of an IRI? Is It Being Used?" *Reading Horizons*, v28 n2 p92-101 Win 1988.

Reports on a survey which indicates that classroom teachers rarely use the Informal Reading Inventory. Suggests that teacher trainers focus on other more efficient means of obtaining reading diagnosis.

Walter, Richard B. "History and Development of the Informal Reading Inventory." 1974. 18p. [ED 098 539]

Presents the history of the IRI and the problems of validity, reliability, and the selection of performance criteria. Discusses the value of IRIs for determining the instructional level of students. Concludes with selected literature that supports the contention that most teachers cannot be successful in using the IRIs without training in construction, administration, and interpretation of such an instrument.

General Uses

Bader, Lois A.; Wiesendanger, Katherine D. "Realizing the Potential of Informal Reading Inventories," *Journal of Reading*, v32 n5 p402-08 Feb 1989.

Discusses the use of IRIs in evaluating reading performance. Notes that although the IRI provides an in-depth evaluation of reading behavior, it should be used in conjunction with other information to assess reading ability.

Blanchard, Jay; Johns, Jerry. "Informal Reading Inventories—A Broader View," *Reading Psychology*, v7 n3 piii-vii 1986.

Concludes that IRIs can be useful, flexible assessment and instruction tools in the hands of knowledgeable teachers. Offers suggestions for their use.

Harris, Larry A.; Latik, Rosary M. "Teachers' Use of Informal Reading Inventories: An Example of School Constraints," *Reading Teacher*, v40 n7 p624-30 Mar 1987.

Reports on what started out to be a survey of the use of IRIs by teachers that revealed the technique to be embedded in a complex environment. Concludes that the use of IRIs and other diagnostic methods can be limited when teachers do not have primary responsibility for making placement decisions.

Kress, Roy. "Some Caveats When Applying Two Trends in Diagnosis: Remedial Reading" ERIC Digest Number 6. ERIC Clearinghouse on Reading and Communication Skills, Bloomington, IN. 1988. 3p. [ED 297 303]

Examines the use of IRIs for student placement in reading groups and the use of computerized diagnosis and its limitations. Encourages careful use to minimize limitations.

Masztal, Nancy B.; Smith, Lawrence L. "Do Teachers Really Administer IRIs?" *Reading World*, v24 n1 p80-83 Oct 1984.

Concludes that most elementary school teachers surveyed were familiar with IRIs and knew how to administer them.

Critiques and Issues

Caldwell, JoAnne. "A New Look at the Old Informal Reading Inventory," *Reading Teacher*, v39 n2 p168-73 Nov 1985.

Indicates that the format and use of the IRIs need to be modified in order to address recent research findings of schema theory, text analysis, and metacognition.

Cardarelli, Aldo F. "The Influence of Reinspection on Students' IRI Results," *Reading Teacher*, v41 n7 p664-67 Mar 1988.

Claims that in the conventional administration of the IRI comprehension diagnosis is inordi-

nately influenced by the reader's ability to recall information. Suggests that allowing reinspection by the reader restores recall to its proper function and may result in other advantages.

Duffelmeyer, Frederick A.; Duffelmeyer, Barbara Blakely. "Main Idea Questions on Informal Reading Inventories," *Reading Teacher*, v41 n2 p162-66 Nov 1987.

Considers whether comprehension questions that claim to assess students' skills in finding main ideas may in fact be measuring their knowledge of identifying the passage topic.

Gillis, M. K.; Olson, Mary W. "Elementary IRIs: Do They Reflect What We Know about Text Type/Structure and Comprehension?" *Reading Research and Instruction*, v27 n1 p36-44 Fall 1987.

Analyzes four IRIs to determine the text type of each passage, whether narrative passages are well formed, and whether expository passages are well organized. Finds almost half the narratives poorly formed. Concludes that the lack of continuity in text type and organization could result in students' comprehension scores being erratic and invalid.

Warren, Thomas S. "Informal Reading Inventories—A New Format." Paper presented at the 11th Annual Meeting of the Southeastern Regional Conference of the International Reading Association, 1985. 11p. [ED 269 740]

Discusses weaknesses in both published and teacher-made IRIs. Suggests using the Fry readability formula. Introduces teachers to a new format for published inventories.

Validity and Reliability Research

Anderson, Betty. "A Report on IRI Scoring and Interpretation." Paper presented at the 31st Annual Meeting of the International Reading Association, 1986. 12p. [ED 271 725]

Examines what oral reading accuracy level is most appropriate for the instructional level and whether repetitions should count as oral reading errors. Includes tables indicating word recognition accuracy at each level of an IRI and percentage of oral reading accuracy with and without repetitions.

Duffelmeyer, Frederick A.; Duffelmeyer, Barbara Blakely. "Are IRI Passages Suitable for Assessing Main Idea Comprehension?" *Reading Teacher*, v42 n6 p358-63 Feb 1989.

Discusses characteristics reading passages must have if they are to be used for main idea assessment. Analyzes each grade one to grade

six passage on the Analytical Reading Inventory, Basic Reading Inventory, and Informal Reading Inventory, measuring suitability for use in main idea assessment. Finds many passages are unsuitable.

Fuchs, Lynn S.; and others. "The Validity of Informal Reading Comprehension Measures," *Remedial and Special Education (RASE)*, v9 n2 p20-28 Mar-Apr 1988.

Assesses the criterion, construct, and concurrent validity of four informal reading comprehension measures (question answering tests, recall measures, oral passage reading tests, and cloze techniques) with 70 mildly and moderately retarded middle and junior high school boys. Finds that correct oral reading rate score demonstrated the strongest criterion validity.

Helgren-Lempesis, Valerie A.; Mangrum, Charles T., II. "An Analysis of Alternate-Form Reliability of Three Commercially-Prepared Informal Reading Inventories," *Reading Research Quarterly*, v21 n2 p209-15 Spr 1986.

Examines the interclass and intraclass reliability of three published IRIs and their alternate forms and concludes that though acceptable, the reliabilities of the inventories suggest the need for cautious interpretation.

Homan, Susan P.; Klesius, Janell P. "A Re-Examination of the IRI: Word Recognition Criteria," *Reading Horizons*, v26 n1 p54-61 Fall 1985.

Confirms previous findings that the word recognition criterion for instructional reading level on IRIs should be set at about 95% for students reading at grade levels one through six.

Joels, Rosie Webb; Anderson, Betty. "Informal Reading Inventory Comprehension Questions: Are Classification Schemes Valid?" *Reading Horizons*, v28 n3 p178-83 Spr 1988.

Presents a study which examines elementary school students' performance on the JAT (Joels, Anderson, and Thompson) Reading Inventory, noting variable student performance on the different question types. Reports that the validity of the JAT as a diagnostic instrument is established.

Newcomer, Phyllis L. "A Comparison of Two Published Reading Inventories," *Remedial and Special Education (RASE)*, v6 n1 p31-36, Jan-Feb 1985.

Studies the extent to which two commercially published IRIs that identify the same instructional level when administered to 50 children in grades one through seven demonstrate a significant lack of congruence between the instru-

ments, particularly at the intermediate grade levels.

Olson, Mary W.; Gillis, M. K. "Text Type and Text Structure: An Analysis of Three Secondary Informal Reading Inventories," *Reading Horizons*, v28 n1 p70-80 Fall 1987.

Suggests that IRIs should include both narrative and expository passages. Describes a study of several reading inventories indicating that some current secondary school IRIs have been constructed with some consistency of text types. No clear picture of text structure for the inventories was found.

Special Populations

Cheek, Earl H., Jr.; and others. "Informal Reading Assessment Strategies for Adult Readers," *Lifelong Learning*, v10 n7 p8-10, 25-26 May 1987.

Describes practical and readily accessible informal assessment strategies for evaluating adult readers. Includes (1) observation, (2) simplified reading inventories, (3) cloze procedures, (4) group reading inventories, (5) criterion-referenced tests, and (6) IRIs.

LaSasso, Carol; Swaiko, Nancy. "Considerations in Selecting and Using Commercially Prepared Informal Reading Inventories with Deaf Students," *American Annals of the Deaf*, v128 n4 p449-52 Aug 1983.

Offers guidelines for the selection and use of commercially prepared IRIs with deaf students. Modifications for deaf students pertain to: selection of the passage to begin testing, the criteria for oral and silent reading levels, and procedures for estimating students' reading potential levels.

Manning, Maryann; and others. "A Comparison among Measures of Reading Achievement with Low Income Black Third Grade Students." Paper presented at the 69th Annual Meeting of the American Educational Research Association, 1985. 26p. [ED 261 074]

Compares the results of different types of reading achievement measures for 58 low-income urban black third graders. Finds that correlations among all of the measures were moderate to high. Examination of teachers' judgments regarding reading book placement, as compared to test results, indicated that teachers underestimated students' reading ability and placements did not reflect test results.

Scales, Alice M. "Alternatives to Standardized Tests in Reading Education: Cognitive Styles and In-

Informal Reading Inventories

formal Measures," *Negro Educational Review*, v38 n2-3 pp99-106 Apr-Jul 1987.

Discusses students with various cognitive styles and their inability to perform well on standardized tests. Notes that impulsive and reflective style students seem to do better on informal tests. Suggests a combination of standardized and informal testing for making educational decisions.

Sullivan, Joanna. "Differences in the Oral Reading Performance of English and Spanish Speaking Pupils from the United States and Venezuela," *Journal of Research and Development in Education*, v19 n4 p68-73 Sum 1986.

Compares results of 90 pupils in grades one through three, half English-speaking and half Spanish-speaking, on IRIs administered in their respective countries. Determines by analysis of variance whether significant differences exist between decoding errors of pupils in both countries.



Reading Assessment in Elementary Education

By Roger Sensenbaugh

The state of reading assessment at the elementary level is in flux. Some writers argue, very forcefully, that the construction of standardized tests has not kept up with advances in reading research and that current standardized tests do more harm than good. Others argue that alternatives to standardized tests have their own problems. The consensus seems to be that standardized tests and alternative, classroom-based assessment each have their place and that both kinds of testing must be chosen, used, and evaluated with caution.

Overview

Farr, Roger. "New Trends in Reading Assessment: Better Tests, Better Uses," *Curriculum Review*, v27 n1 p21-23 Sep-Oct 1987.

Focuses on the need to develop better tests of students' reading abilities and better interpretation of test scores. Describes criterion-referenced tests versus norm-referenced tests, highlighting the Degrees of Reading Power and Metropolitan Achievement Tests: Reading, and discusses the need for assessing the reading process.

Fredericks, Anthony D. "Latest Model," *Reading Teacher*, v40 n8 p790-91 Apr 1987.

Offers a humorous look at the problem of assessment.

Froese, Victor. "Language Assessment: What We Do and What We Should Do!" *Canadian Journal of English Language Arts*, v11 n1 p33-40 1988.

Sketches some of the dilemmas in language assessment and presents exemplary practical approaches to assessment in the areas of listening, oral language, reading, and writing.

Manning, Gary; and others. "First Grade Reading Assessment: Teacher Opinions, Standardized Reading Tests, and Informal Reading Inventories." Paper presented at the 14th Annual Meeting of the Mid-South Educational Research Association, 1985. 13p. [ED 265 204]

Investigates the relationship between and among the results of three types of reading as-

sessments in the first grade: a standardized reading test (the Stanford Achievement Test); an informal reading inventory (the Classroom Reading Inventory); and teacher judgment of student rank in reading achievement. Teacher opinion correlated with all subtests of the standardized test and the word recognition portion of the reading inventory. The achievement of all combined classrooms and most individual classrooms in the study was average or above, based on national norms.

Valencia, Sheila; Pearson, P. David. "Reading Assessment: Time for a Change," *Reading Teacher*, v40 n8 p726-32 Apr 1987.

Argues that the tests used to measure reading achievement do not reflect recent advances in the understanding of the reading process, and that effective instruction can best be fostered by resolving the discrepancy between what is known and what is measured.

Standardized Tests

Blanchard, Jay S. "Test Review: Computer-Based Reading Assessment Instrument (CRAI)," *Reading Teacher*, v41 n1 p92-94 Oct 1987.

Evaluates the Computer-Based Assessment instrument (CRAI) as a test of reading proficiency. Notes strengths of CRAI, including its use as a quick assessment of silent reading comprehension level, and the problems with readability and content-specific word lists and the lack of scoring features.

Grunkmeyer, Virgil. "Primary Reading Assessment—Quick and Easy," *Reading Horizons*, v27 n2 p86-88 Win 1986.

Explains the use of the Dolch List in the lower elementary grades.

Rasool, Joan M.; Royer, James M. "Assessment of Reading Comprehension Using the Sentence Verification Technique: Evidence from Narrative and Descriptive Texts," *Journal of Educational Research*, v79 n3 p180-84 Jan-Feb 1986.

The sentence verification technique (SVT) was used to test 44 third graders, to assess the validity of the technique. Results were viewed as being consistent with the interpretation that the SVT is a valid means of measuring reading comprehension.

Reynolds, Cecil R.; and others. "Regression Analyses of Bias on the Kaufman Assessment Battery for Children," *Journal of School Psychology*, v23 n2 p195-204 Sum 1985.

Investigates the criterion-related validity of the Kaufman Assessment Battery for Children (K-ABC), predicting reading comprehension, arithmetic, and general achievement, for large samples of blacks and whites tested during the standardization of the battery. Finds that the Sequential and Mental Processing Composite scales tended to overpredict black children's academic levels, especially on the achievement scales.

Roberts, Douglas B.; and others. "Michigan Educational Assessment Program Handbook, 1986-87." Michigan State Board of Education, Lansing, MI, 1986. 109 p. [ED 278 710]

This handbook was developed to assist educators in analyzing, using, and reporting Michigan Educational Assessment Program (MEAP) test results. It includes an overview of the program and a description of the tests; numbers of objectives and test items for each skill area; suggested methods; techniques and strategies for using the results at the student, school, and district levels; and a discussion of appropriate uses or the test results.

Sawyer, Diane J.; and others. "Test Review: Group Assessment in Reading: Classroom Teacher's Handbook," *Reading Teacher*, v39 n6 p544-47 Feb 1986.

Examines the GAR, which is intended as a group assessment of reading ability for elementary and secondary school students in the areas of reading level, comprehension, study skills, and reading interests. Concludes that the test has many shortcomings.

Alternative Measures

Bartoli, Jill Sunday. "The Paradox in Reading: Has the Solution Become the Problem?" *Journal of Reading*, v28 n7 p580-84 Apr 1985.

Suggests that continually refined and segmented reading assessment measures may contribute to reading problems. Discusses three solutions to reading difficulties that have be-

come problems themselves and suggests that more holistic, socially interactive teaching methods are a better solution to reading disabilities.

Calfee, Robert C. "The School as a Context for Assessment of Literacy," *Reading Teacher*, v40 n8 p738-43 Apr 1987.

Notes that classroom assessment of literacy is dominated by methods more appropriate to external mandates. Suggests an alternative method grounded in the teacher's professional judgment and in the relations between curriculum, instruction, and assessment.

Dixon, John. "Becoming a Maturer Reader," *Reading Teacher*, v40 n8 p761-65 Apr 1987.

Points out that children's growth in response to literature is not assessed by existing standardized tests or by progress from one textbook to another. Suggests guidelines for teacher observation of children's responses and provides a checklist for assessing oral and written reactions.

Johnston, Peter. "Teachers as Evaluation Experts," *Reading Teacher*, v40 n8 p744-48 Apr 1987.

Argues that process-oriented evaluation of children's literacy by the classroom teacher is more efficient and more instructionally valid than current test-driven evaluation procedures.

Leadbetter, Peter; Winteringham, David. "Data-Pac: What's in It for Teachers?" *British Journal of Special Education*, v13 n4 p162-64 Dec 1986.

The article describes Data-Pac (Daily Teaching and Assessment for Primary Aged Children), materials which assess student performance in reading, mathematics, handwriting, and spelling and present a selection of sequenced teaching objectives for an individualized program. Materials reflect the concepts of criterion-referenced assessment, direct instruction, behavioral objectives, and precision teaching.

Moore, David W. "A Case for Naturalistic Assessment of Reading Comprehension," *Language Arts*, v60 n8 p957-69 Nov-Dec 1983.

Presents a historical overview of the introduction of the major reading comprehension assessments, showing that the predominant approaches were shaped by the prevailing educational measurement milieu and were implemented largely in response to public pressure. Argues in favor of a naturalistic reading comprehension assessment for evaluating those behaviors that elude quantification.

Wood, Karen D. "Read First, Test Later: Meeting the Needs of the 'Overskilled' Reader," *Reading Horizons*, v24 n2 p133-40 Win 1984.

Discusses the problems of overusing workbooks, dittos, and basal assessment tests in beginning reading instruction. Proposes alternatives.

Woodley, John W. "Reading Assessment from a Whole Language Perspective." 1988. 16 p. [ED 296 309]

Approaches to reading assessment within the whole language framework include a print awareness task, book handling task, patterned language task, reading interview, miscue analysis, and situational responses to reading. Argues that the observations made by teachers using these assessments provide a meaningful alternative to heavy reliance on standardized tests and lead to a more effective educational program for all.

Woodley, John W.; Smith, R. Lee. "Reading Assessment for the Young Reader." 1988. 23 p. [ED 295 126]

Methods used to diagnose a seven-year-old boy's reading problems illustrate the fact that reading assessments based upon a reader's strengths and his/her understanding and control of the process will provide information which is more useful to teachers and parents than that provided by the numerical results of standardized tests.

Informal Reading Inventories

Cardarelli, Aldo F. "The Influence of Reinspection on Students' IRI Results," *Reading Teacher*, v41 n7 p664-67 Mar 1988.

Claims that in the conventional administration of the Informal Reading Inventory (IRI) comprehension diagnosis is inordinately influenced by the reader's ability to recall information. Suggests that allowing reinspection by the reader restores recall to its proper function and may result in other advantages.

Fuchs, Lynn S.; and others. "The Validity of Informal Reading Comprehension Measures," *Remedial and Special Education (RASE)*, v9 n2 p20-28 Mar-Apr 1988.

Assesses the criterion, construct, and concurrent validity of four informal reading comprehension measures (question answering tests, recall measures, oral passage reading tests, and cloze techniques) with 70 mildly and moderately retarded middle and junior high school boys. Re-

sults indicated that correct oral reading rate score demonstrated the strongest criterion validity.

Henk, William A. "Reading Assessments of the Future: Toward Precision Diagnosis," *Reading Teacher*, v40 n9 p860-70 May 1987.

Concludes that modified standard reading inventories may be made more useful for assessing the specific abilities and needs of disabled readers. Offers suggestions for making modifications.

Johnson, Marjorie Seddon; and others. "Informal Reading Inventories." second edition. Reading Aids Series, IRA Service Bulletin. International Reading Association, Newark, DE 1987. 164 p. [ED 277 993; for the first edition, see ED 072 437.]

Represents a comprehensive description of the use of informal reading inventories (IRIs). Provides teachers and reading specialists with practical strategies for forming diagnostic impressions that are useful for planning reading instruction.

Searls, Evelyn F. "What's the Value of an IRI? Is It Being Used?" *Reading Horizons*, v28 n2 p92-101 Win 1988.

Reports on a survey which indicates that classroom teachers rarely use the Informal Reading Inventory—a diagnostic and placement instrument for reading comprehension long recommended by teacher trainers. Suggests that teacher trainers focus on other more efficient means of obtaining reading diagnosis.

Learning Disabled

Dudley-Marling, Curt. "Assessing the Reading and Writing Development of Learning-Disabled Students: An Holistic Approach," *B. C. Journal of Special Education*, v12 n1 p41-51 1988.

Recommends a holistic approach to reading assessment, in contrast to traditional practices in reading and writing assessment which focus on fragmented, isolated skills. Sees children's reading and writing as communicative behaviors which are effectively evaluated through systematic observation as they occur in natural settings.

Ewoldt, Carolyn. "Reading Tests and the Deaf Reader," *Perspectives for Teachers of the Hearing-Impaired*, v5 n4 p21-24 Mar-Apr 1987.

Argues that standardized reading tests are likely to provide an inaccurate assessment of reading comprehension for deaf students be-

cause of the lack of test coaching and test taking skills; item irrelevancy; and the difficulty of test directions. Testing alternatives include parent and teacher observation of students and qualitative evaluations of reading skills and strategies.

Gupta, R. M. "Learning Efficiency versus Low IQ and/or Teachers' Ratings as Predictors of Reading Ability of 'Mentally Defective' Children: A Longitudinal Study," *Educational Studies*, v11 n2 p109-18 1985.

Asserts that low IQ should not be deemed an index of poor learning ability. Information about middle school children's learning efficiency as measured by the Learning Efficiency Test Battery was found to be more useful for predicting reading ability than conventional types of assessment.

Silberman, Roseanne K.; Sowell, Virginia. "The Visually Impaired Student with Learning Disabilities: Strategies for Success in Language Arts," *Education of the Visually Handicapped*, v18 n4 p139-50 Win 1987.

Recommends assessment techniques and teaching strategies in the area of reading and language arts for the visually impaired student with learning disabilities. Outlines reading approaches, practical strategies for teaching reading comprehension and spelling, and suggestions for organizing the classroom environment.

Teeter, Phyllis Anne; Smith, Philip L. "Neuropsychological Assessment and Training of Cognitive Processing Strategies for Reading Recognition and Comprehension: A Computer Assisted Program for Learning Disabled Students." Final Report. Wisconsin Univ., Milwaukee, WI, 1986. 12p. [ED 278 209]

Describes the development and validation of microcomputer software during a two-year project to help assess the skills of reading disabled elementary grade children and to provide basic reading instruction.

ERIC/RCS



A Profile



Clearinghouse on Reading and Communication Skills
Indiana University
Smith Research Center, Suite 150
Bloomington, IN 47408-2698
(812) 855-5847

ERIC/RCS

Clearinghouse on
Reading and Communication Skills

THE ERIC NETWORK

ERIC, the Educational Resources Information Center sponsored by the Office of Educational Research and Improvement of the U.S. Department of Education, is a national educational information system designed to do the following:

MAKE AVAILABLE hard-to-find educational materials, such as research reports, literature reviews, curriculum guides, conference papers, projects or program reviews, and government reports.

ANNOUNCE these materials in *Resources in Education (RIE)*, a monthly journal containing abstracts of each item.

PUBLISH annotations of journal articles in *Current Index to Journals in Education (CIJE)*, a monthly guide to current educational periodicals.

PREPARE magnetic tapes (available by subscription) of the ERIC database (*RIE* and *CIJE*) for computer retrieval.

CREATE products that analyze and synthesize educational information.

PROVIDE a question-answering service.

Most of the educational material announced in *RIE* may be seen on microfiche in one of the more than 700 educational institutions (college and university libraries; local, state, and federal agencies; and not-for-profit organizations) that have complete ERIC collections. It can also be purchased from the ERIC Document Reproduction Service (EDRS) on microfiche, a 4" x 6" microfilm card containing up to 96 pages of text; or paper copy, a photographically reproduced copy.

Journal articles announced in *CIJE* are not available through ERIC, but can be obtained from a local library collection, from the publisher, or from University Microfilms International.

ERIC/RCS

Where would you go to find the following kinds of information?

Suggested activities and instructional materials to teach elementary school students listening skills.

Instruction in writing that focuses on the writing process.

A list of suggestions for parent involvement in reading instruction.

Your answer should include the **ERIC Clearinghouse on Reading and Communication Skills (ERIC/RCS)**. Each year ERIC/RCS helps thousands of people find useful information related to education in reading, English, journalism, theater, speech and mass communications. While we cannot meet every educational information need, anyone with a strong interest in or involvement with teaching communication skills should look to ERIC/RCS as a valuable resource.

The ERIC/RCS Clearinghouse is now located at Indiana University, in Bloomington, Indiana.

Write or call ERIC/RCS for the following information:

- How to submit material for inclusion in the ERIC database.
- How to conduct manual or computer searches of the ERIC database.
- Where to get an ERIC computer search.
- Which organizations and institutions near you have ERIC microfiche collections.
- To obtain a list of ERIC/RCS publications.

ERIC/RCS PUBLICATIONS

These publications represent a low-cost way to build your own personal educational library and are an excellent addition to a school professional library. They are the results of the clearinghouse's efforts to analyze and synthesize the literature of education into research reviews, state-of-the-art studies, interpretive reports on topics of current interest, and booklets presenting research and theory plus related practical activities for the classroom teacher.

ERIC/RCS FAST BIBS (Focused Access to Selected Topics): abstracts or annotations from 20-30 sources in the ERIC database.

ERIC/RCS NEWSLETTERS concerning clearinghouse activities and publications, featuring noteworthy articles for communication skills educators.

ERIC DIGESTS with information and references on topics of current interest.

ERIC/RCS SERVICES

As part of its effort to provide the latest information on education research and practice, ERIC/RCS offers the following services:

- Question-answering, a major clearinghouse priority along with processing documents and producing publications.
- ERIC orientation workshops at local, regional, and national levels, at cost.
- Multiple copies of ERIC/RCS no-cost publications for workshop distribution.
- Clearinghouse-sponsored sessions at professional meetings on timely topics in reading and communication skills.
- Customized computer searches of the ERIC database. (The charge for this service is \$30 for the first 50 citations.)

ERIC/CLEARINGHOUSES

ERIC Clearinghouse on Adult, Career, and Vocational Education
Ohio State University
Center on Education and Training for Employment
1900 Kenny Road
Columbus, OH 43210-1090
(614) 292-4353
(800) 848-4815

ERIC Clearinghouse on Counseling and Personnel Services
University of Michigan
School of Education, Room 2108
610 East University Street
Ann Arbor, MI 48109-1259
(313) 764-9492

ERIC Clearinghouse on Educational Management
University of Oregon
1787 Agate Street
Eugene, OR 97403-5207
(503) 346-5043

ERIC Clearinghouse on Elementary and Early Childhood Education
University of Illinois
College of Education
805 West Pennsylvania Avenue
Urbana, IL 61801-4897
(217) 333-1386

ERIC Clearinghouse on Handicapped and Gifted Children
Council for Exceptional Children
1920 Association Drive
Reston, VA 22091-1589
(703) 620-3660

ERIC Clearinghouse on Higher Education
George Washington University
One Dupont Circle, N.W.
Suite 630
Washington, DC 20036-1183
(202) 296-2597

ERIC Clearinghouse on Information Resources
Syracuse University
Huntington Hall, Room 030
150 Marshall Street
Syracuse, NY 13244-2340
(315) 443-3640

ERIC Clearinghouse for Junior Colleges
University of California at Los Angeles
Math-Sciences Building, Room 8118
405 Hilgard Avenue
Los Angeles, CA 90024-1564
(213) 825-3931

ERIC Clearinghouse on Languages and Linguistics
Center for Applied Linguistics
1118 22nd Street, N.W.
Washington, DC 20037-0037
(202) 429-9551

ERIC Clearinghouse on Reading and Communication Skills
Indiana University, Smith Research Center
2805 East 10th Street, Suite 150
Bloomington, IN 47408-2698
(812) 855-5847

ERIC Clearinghouse on Rural Education and Small Schools
Appalachia Educational Laboratory
1031 Quarrier Street
P. O. Box 1348
Charleston, WV 25325-1348
(800) 624-9120 (Outside WV)
(800) 344-6646 (In WV)

ERIC Clearinghouse for Science, Mathematics, and Environmental Education
Ohio State University
1200 Chambers Road, Room 310
Columbus, OH 43212-1792
(614) 292-6717

ERIC Clearinghouse for Social Studies/Social Science Education
Indiana University
Social Studies Development Center
2805 East 10th Street, Suite 120
Bloomington, IN 47408-2698
(812) 855-3838

ERIC Clearinghouse on Teacher Education
American Association of Colleges for Teacher Education
One Dupont Circle, N.W., Suite 610
Washington, DC 20036-2412
(202) 293-2450

ERIC Clearinghouse on Tests, Measurement, and Evaluation
American Institutes for Research (AIR)
Washington Research Center
3333 K Street, N.W.
Washington, DC 20007-3541
(202) 342-5060

ERIC Clearinghouse on Urban Education
Teachers College, Columbia University
Institute for Urban and Minority Education
Main Hall, Room 300, Box 40
525 W. 120th Street
New York, NY 10027-9998
(212) 678-3433

ERIC Processing and Reference Facility
ARC Professional Services Group
Information Systems Division
2440 Research Boulevard, Suite 400
Rockville, MD 20850-3238
(301) 258-5500

ERIC Document Reproduction Service (EDRS)
Cincinnati Bell Information Systems (CBIS) Federal
7420 Fullerton Road, Suite 110
Springfield, VA 22153-2852
(800) 443-ERIC (3742)

ERIC/RCS



**Computer
Search Service**



Clearinghouse on Reading and Communication Skills
Indiana University
Smith Research Center, Suite 150
Bloomington, IN 47408-2698
(812) 855-5847

WOULD YOU LIKE EASY ACCESS TO EDUCATIONAL INFORMATION?

If you are involved in graduate studies, developing and evaluating programs or curricula, designing a new course or revamping an old one, writing a report, or any of countless other projects in the areas of reading, English, journalism, speech, or drama, then you already know how important it is to locate and use the most relevant and current resources. And if you have not been using ERIC, you have been missing a lot, simply because many resources in the ERIC database are not available anywhere else.

These resources cover all areas of education, including research reports, case studies, bibliographies, surveys, government reports, curriculum guides, teaching guides, program descriptions and evaluations, instructional materials, course descriptions, speeches, and conference reports.

Currently about 700,000 document abstracts and journal article annotations make up the ERIC database, which grows at the rate of approximately 30,000 entries per year. In order to make these resources more accessible to you, the ERIC Clearinghouse on Reading and Communication Skills offers a computerized database search service.

WHAT IS THE DIFFERENCE BETWEEN A COMPUTER SEARCH AND A MANUAL SEARCH?

The computer is much faster and far more efficient. Some highly complex searches that a computer can do in minutes would be virtually impossible for a person to do using the ERIC indexes *Resources in Education* and *Current Index to Journals in Education*. The computer offers the opportunity to search under several index terms at the same time.

HOW DOES A COMPUTER SEARCH WORK?

ERIC uses a coordinate indexing system, with each document indexed under as many as 12 index terms,

or "descriptors." These descriptors identify the educational level and content areas of a document. A computer search involves combining the descriptors for the specific search question into a search statement, which is then entered into the computer. Those documents that meet the requirements of the search statement are retrieved.

WHAT DO I GET?

You receive a printout of ERIC references that include complete bibliographic citations, annotations of journal articles, and 150- to 250-word abstracts of documents on your topic.

WHAT DOES IT COST?

The minimum charge for a customized computer search is \$30 for up to 50 journal citations and/or document abstracts, plus \$.10 for each additional reference. This fee includes handling and mailing. You will be billed for the cost upon completion of the search.

HOW LONG DOES IT TAKE?

Generally, the time from our receipt of your request to your receipt of the printout is two weeks.

WHAT DO I HAVE TO DO?

No prior knowledge of computers or computer searching is necessary. A member of our staff can help you define your search question. Our knowledge of the ERIC database, especially in the areas of reading and the other English language arts, can be an important aid in developing a successful search.

If you would like our clearinghouse to run a computer search on a topic of your choice, fill out and return the attached order form. If your question needs further clarification, a member of our staff will call you before conducting the search.

COMPUTER SEARCH SERVICE ORDER FORM

Name _____

Position _____

Organization _____

Street _____

City _____ State _____

Zip _____ Phone _____

Purpose of search:

Education level _____

Format (circle one):

- | | |
|------------------------|-------------------------|
| Research reports | Journal citations only |
| Practical applications | Document abstracts only |
| Both | Both |

Known authority in field (if any) _____

Possible key words or phrases:

Restrictions: Year(s) _____

Monetary _____

Statement of search question:



Clearinghouse on Reading and Communication Skills
 Indiana University
 Smith Research Center, Suite 150
 Bloomington, IN 47408-2698
 (812) 855-5847

Searching ERIC in Print

ERIC (the Educational Resources Information Center) is an information resource designed to make educational literature easily accessible through two monthly bibliographic publications: *Resources in Education (RIE)* and *Current Index to Journals in Education (CIJE)*. By following the steps below, individuals can quickly locate literature for their specific educational information needs.

1. **Phrase Your Question as Precisely as Possible.** Then list the key concepts of that question in as few words or phrases as possible.
2. **See If Your Indexing Terms are Listed in the Thesaurus of ERIC Descriptors.** If they are listed, look for other descriptors that come close to matching your terms. To help you in this procedure most descriptors are listed with a display of cross-references to other descriptors, including narrower terms (NT); broader terms (BT); and related terms (RT) within the same area of classification.
3. **Go to the Subject Index Sections of the Monthly, Seminannual, or Annual Issues of RIE.** Read the titles listed under the descriptors you have chosen and note the six-digit ED (ERIC Document) numbers for those documents that seem appropriate for your information needs.
4. **Locate and Read the Abstracts of These Documents in the Main Entry Sections of the Monthly RIEs.** Main entries are listed consecutively by ED number.
5. **To Find the Complete Text of the Document, First Examine the Abstract to See if It Has an EDRS Price.** If it does, the document is available both in ERIC microfiche collections (which are owned by over 700 libraries nationwide) and through the ERIC Document Reproduction Service (EDRS) in Virginia. EDRS ordering information is given in the back of every RIE. If the document is not available through EDRS, it is due to copyright restrictions placed on the document by its author or publisher. In these cases, ordering information will be given in the document abstract in a note labeled "available from."
6. **If You Have Trouble With Your Search** (e.g., the documents are not exactly what you want or you find no documents), return to steps one and two, checking your search terms. You also may want to ask your librarian for assistance in identifying descriptors. If you want to expand your search to include journal articles, use *CIJE* in addition to *RIE*. Remember, however,

that copies of journal articles are not available from EDRS. If you want to read the complete article, you must obtain the journal from a local library, the publisher, or University Microfilms International.

- A. A kindergarten teacher has been asked by some of his neighbors who have preschoolers if there is anything they can do at home to help their children get ready for writing in school. The teacher decides that the key concept involved is Writing Readiness.
- B. The teacher checks that term in the *ERIC Thesaurus* at a nearby university library and finds it listed.
- C. Selecting one of the library's volumes of *RIE*, in this case the January-June 1988 semiannual index, the teacher finds the following documents in the subject index:

Writing Readiness

- Children's Names: Landmarks for Literacy?
 ED 290 171
- Integrating Reading and Writing Instruction at the Primary level.
 ED 286 158
- Sister and Brother Writing Interplay.
 ED 285 176
- Writing Begins at Home: Preparing Children for Writing before They Go to School.
 ED 285 207
- D. ED 285 207 Looks like an appropriate resource, so the teacher finds that ED number in a monthly issue of *RIE* "January 1988" in the document resume section:

ED 285 207 CS 210 790

Clay, Marie
Writing Begins at Home: Preparing Children for Writing before They Go to School.
 Report No. ISBN-0-435-08452-6
 Pub Date_87
 Note_64p.
 Available from Heinemann Educational Books Inc., 70 Court St., Portsmouth, NH 03801 (\$12.50)
 Pub type_Books (010) - Guides - Non-Classroom (055)
Document Not Available from EDRS.
 Descriptors_Case Studies, Family Environment, Language Acquisition, *Parent Child Relationship, Parent Participation, Parent Role, *Preschool Children, Preschool Education, Psychomotor Skills, Reading Writing Relationship, Writing Exercises, *Writing Readiness, *Written Language

Identifiers_ *Children's Writing, *Emergent Literacy, Writing Attitudes

Intended for parents of preschoolers, this book offers samples of children's writing (defined as the funny signs and symbols that pencils make) and attempts to show how parents can support and expand children's discovery of printed language before children begin school. Each of the eight chapters contains numerous examples of young children's drawing and printing, as well as helpful comments and practical considerations to orient parents. The chapters are entitled: (1) Getting in Touch; (2) Exploration and Discoveries; (3) I Want to Record a Message; (4) We Follow Sally Ann's Progress; (5) Individual Differences at School Entry; (6) How Can a Parent Help?; (7) The Child at School; and (8) Let Your Child Read. (References and a list of complementary publications are attached.) (NKA)

- E. The teacher notes the price and ordering information for his neighbors. The teacher can then select other *RIE* documents to review from other volumes of the *RIE* index, or check *CIJE* for journal articles on writing readiness.

KEYS TO USING ERIC

Thesaurus of ERIC Descriptors

The *ERIC Thesaurus* is the key to a search of the ERIC database, with approximately 10,000 terms and cross-references in the fields of education. Scope notes serve as definitions for most descriptors. Each document in the ERIC system is assigned several descriptors from the *Thesaurus* that indicate the essential content of the document. Once you have familiarized yourself with ERIC's descriptors and the *Thesaurus*, you have put thousands of pages of educational materials at your fingertips.

Resources in Education (RIE)

This publication prints the abstracts of documents processed and indexed for the ERIC system. About 1000 abstracts from ERIC Clearinghouses appear each month, arranged by ED number in the main entry section of *RIE*. In addition to the main entry section, each volume of *RIE* contains three indexes. Document titles are listed by subject (descriptor term), author, and institution. Unless otherwise noted, copies of documents abstracted in *RIE* are available from the ERIC Document Reproduction Service.

Current Index to Journals in Education (CIJE)

This ERIC publication directs you to educational articles from over 800 educational journals. Annotations describing over 1400 articles each month are arranged in the main entry section of *CIJE* according to EJ (ERIC Journal) number and are listed in subject, author, and journal indexes. Copies of journal articles annotated in *CIJE* are not available from the ERIC Document Reproduction Service but may be obtained from local library collections, from the publisher, or (in most cases) from University Microfilms International.

Semiannual and annual issues of *RIE* and *CIJE* consolidate the monthly subject, author, and institution indexes.

COMPUTER SEARCHES

Over 900 organizations across the nation, including the individual ERIC Clearinghouses, provide computerized searches of the ERIC database. The search strategy—selecting the key descriptors and scanning the documents under those subject headings—is the same as for manual searching. The differences are in time and cost. When you search by computer, you can combine several terms instantaneously for any or all issues of *RIE/CIJE*; in effect, you thumb through more than 200 issues of *RIE* at once. Costs for these services vary; while some institutions offer computer searches at no cost to in-state educators, others may charge from \$5 to \$300, depending upon the complexity and depth of the search or the kind of feedback requested. Our Clearinghouse can assist you in developing computer search strategy, and can provide information about computer search facilities near you. No prior knowledge of computers or computer searching is necessary.

CUSTOMIZED SEARCHES AVAILABLE

Customized computer searches of the ERIC database will be performed for you by the ERIC/RCS Clearinghouse, if you wish. The charge for this service is \$30 for the first 50 citations. If your search problem does not fall within the scope of ERIC/RCS, we will refer your question to one of the other Clearinghouses in the ERIC System, or help you contact the appropriate Clearinghouse directly.

ERIC/RCS



Submitting Material



Clearinghouse on Reading and Communication Skills
Indiana University
Smith Research Center, Suite 150
Bloomington, IN 47408-2698
(812) 855-5847

WHY NOT SEND YOUR MATERIAL TO ERIC/RCS?

The ERIC system is always looking for high-quality educational documents to announce in *Resources in Education (RIE)*, ERIC's monthly index of document abstracts. ERIC, Educational Resources Information Center, sponsored by the Office of Educational Research and Improvement of the U.S. Department of Education, is a national educational information system designed to make available hard-to-find educational materials (such as research reports, literature reviews, conference papers, curriculum guides, and other resource information). Through a network of clearinghouses, each of which focuses on a specific field in education, materials are acquired, evaluated, cataloged, indexed, abstracted, and announced in *RIE*.

The Clearinghouse on Reading and Communication Skills is responsible for educational materials and information related to research, instruction, and personnel preparation in such areas as English language arts, reading, composition, literature, journalism, speech communication, theater and drama, and the mass media.

ERIC relieves you of the need to maintain copies of your materials for distribution to people or organizations requesting them, since documents can be ordered individually in both microfiche and paper copy formats from the ERIC Document Reproduction Service (EDRS) in Springfield, Virginia.

Dissemination through ERIC provides a wide audience for your materials since there are more than 700 ERIC microfiche collections throughout the world. In addition, your material can be retrieved at the more than 450 locations that provide computer searches of the ERIC database.

Because your documents are permanently indexed in *RIE* and on computer tape, ERIC serves an archival function as well as keeping users informed of current theories and practices.

We depend on our network of volunteer contributors to accomplish our goal of making information readily available to the educational community and to the general public.

HOW TO SUBMIT YOUR MATERIAL

Please follow the guidelines listed below for preparation of documents. Send two clean, dark-print copies, at least six pages in length, either in original or photocopied form to **Coordinator of Documents, ERIC/RCS, 2805 East Tenth Street, Smith Research Center, Suite 150, Bloomington, Indiana 47408-2698.**

Document Preparation. The following guidelines are designed to ensure that documents will be legible on microfiche and that readable copies will be available to ERIC users:

- Standard 8 1/2" x 11" white or light-tinted paper is preferred.
- Double-spaced pages printed on a laser printer or typed on a standard typewriter (pica or elite) photograph best. Dark-print dot-matrix computer printouts are acceptable.
- Letters and line drawings must be unbroken and as black as possible. Very small or finely drawn letters, as well as photographs and edited copy, will not reproduce well.
- Purple dittos and most colored pages will not photograph clearly.

WHAT HAPPENS NEXT...

To ensure its usefulness to the educational community, each document submitted is evaluated for quality and significance by one of approximately 200 specialists from various universities and the following professional organizations:

International Reading Association; Western College Reading Association; College Reading Association; National Reading Conference; North Central Reading Association; National Council of Teachers of English; Conference on College Composition and Communication; Association for Education in Journalism and Mass Communication; Journalism Education Association; and Speech Communication Association.

If your document is approved by the reviewers, it will be indexed and an abstract of it will appear in *RIE* in approximately three to four months. At the time of issue you will be sent a complimentary microfiche of your material.

If you would like to know the disposition of your document please include a stamped, self-addressed envelope.

The inclusion of your document in the ERIC database in no way affects your copyright or your right to submit it for publication elsewhere. Your document will not be edited but will appear in its entirety.

Alternative Assessment of Performance in the Language Arts: Proceedings of a National Symposium

edited by Carl B. Smith

Multiple-choice and standardized tests, or something else?

If something else, then what?

Portfolios?

Authentic artifacts?

A Whole-Language approach?

If we make big changes in assessment, what do we do about testing and the reliability and reporting of results?

What new policies are required?

What new instruments need to be devised?

How do we communicate these concerns to Mr. and Mrs. Citizen Parent, traditionally sold on standardized tests?

On the other hand, are standardized tests so awful?

This proceedings volume of the national symposium on alternative assessment contains presentations by the following, leading theorists, practitioners, and educators:

Roger Farr and Kaye Lowe

Jerome Harste and William Bintz

Diane Bloom

Bert Wasser and Sharon Dorsey

Don Ernst

Representatives from several test and assessment publishers informed the symposium on new developments in instruments being developed at the publishing houses:

Mike Beck, Fredrick Finch, Gene Jongsma, Sandra Pakes, Barbara Kapinus,
Terry Salinger, Cathy Taylor

One hundred active participants in the national discussion of assessment took part in this benchmark symposium—academics, teachers, administrators, policy-makers, publishers. This proceedings volume includes transcriptions of the highly energetic dialogue and often controversial debates that took place.

“Setting the Future Agenda” by the editor, Carl B. Smith, Director of ERIC/RCS and co-convenor of the symposium.

Post-symposium critical review by participant Marilyn Binkley, National Center for Education Statistics, U.S. Department of Education.

State-of-the-art research reports on portfolio assessment and on informal reading inventories by participant Jerry L. Johns.

G22; \$19.95

Order Form

ship to:
 name _____
 address _____

 city/state/zip _____ phone () _____

Item No.	Qty.	Abbreviated Title	Price	Total Cost
G22		Alternative Assessment of Performance in the Language Arts: Proceedings	\$19.95	
Subtotal				
Minimum order \$5.00			Plus Postage and Handling	
			TOTAL Purchase	

method of payment:

check money order
 P. O. # _____
 MasterCard VISA
 cardholder _____
 card no. _____
 expiration date _____

Order Subtotal	Postage and Handling
\$5.00-\$10.00	\$2.00
\$10.01-\$25.00	\$3.00
\$25.01-\$50.00	\$4.00
\$50.01-\$75.00	\$5.00
\$75.01-\$100.00	\$6.00
\$100.01-\$125.00	\$7.00
\$125.01-\$150.00	\$8.00
over \$150.00	\$9.00

Make checks payable to ERIC/RCS.

Send order form to:
 ERIC/RCS
 Indiana University
 2805 E. 10th Street, Suite 150
 Bloomington, IN 47408-2698