

DOCUMENT RESUME

ED 136 240

CS 003 298

AUTHOR Schnell, Thomas R.  
 TITLE Identifying the Basic Elements of Critical Reading.  
 PUB DATE May 77  
 NOTE 12p.; Paper presented at the Annual Meeting of the International Reading Association (22nd, Miami Beach, Florida, May 2-6, 1977)

EDRS PRICE MF-\$0.83 HC-\$1.67 Plus Postage.  
 DESCRIPTORS \*Content Reading; \*Critical Reading; Critical Thinking; Higher Education; Literature Reviews; \*Reading Instruction; \*Reading Research; \*Reading Skills; Reading Tests; Secondary Education

ABSTRACT

A review of the professional and research literature suggests that definitions of critical reading remain tenuous and somewhat conflicting, largely because of the weakness in validity of current tests of critical reading. Ability to read or think critically appears to be closely related to general mental ability and may be dependent on literal reading ability. Specific instruction in various types of critical reading skills of college-age students does affect performance on critical reading tests, leading to the conclusion that critical reading is a skill which can be taught. Further, it is an important trait in those who may lead our society in the future. Given all the above, the next logical step is to develop ways and materials to aid in the teaching of critical reading skills. (Author/AA)

\*\*\*\*\*  
 \* Documents acquired by ERIC include many informal unpublished \*  
 \* materials not available from other sources. ERIC makes every effort \*  
 \* to obtain the best copy available. Nevertheless, items of marginal \*  
 \* reproducibility are often encountered and this affects the quality \*  
 \* of the microfiche and hardcopy reproductions ERIC makes available \*  
 \* via the ERIC Document Reproduction Service (EDRS). EDRS is not \*  
 \* responsible for the quality of the original document. Reproductions \*  
 \* supplied by EDRS are the best that can be made from the original. \*  
 \*\*\*\*\*

ED 136240

U.S. DEPARTMENT OF HEALTH,  
EDUCATION & WELFARE  
NATIONAL INSTITUTE OF  
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

PERMISSION TO REPRODUCE THIS COPYRIGHTED MATERIAL HAS BEEN GRANTED BY

Thomas R. Schnell

Thomas R. Schnell

University of Missouri-St. Louis  
8001 Natural Bridge Road  
St. Louis, Missouri 63121

TO ERIC AND ORGANIZATIONS OPERATING UNDER AGREEMENTS WITH THE NATIONAL INSTITUTE OF EDUCATION. FURTHER REPRODUCTION OUTSIDE THE ERIC SYSTEM REQUIRES PERMISSION OF THE COPYRIGHT OWNER.

"Identifying the Basic Elements of Critical Reading"

DEVELOPING CRITICAL READING SKILLS IN TWO-YEAR COLLEGE PROGRAMS  
Session/2 Speakers  
Mediterranean East, Doral Hotel

## Identifying the Basic Elements of Critical Reading

### Introduction

A person undertaking a search of the existing literature on the topic of critical reading would notice immediately that there are a rather large number of articles and book chapters dealing with the topic. In reading a few of the articles it would also become apparent that there is little consensus regarding what critical reading is -- the definitions range from a very narrow view such as "Critical reading is recognizing biased writing" to rather broad views such as "Critical reading is the process of comprehending in its highest form." One other thing emerges clearly from the literature; critical reading is viewed as a valuable and important skill, but one which is being taught in an inadequate and limited way. In speculating about the causes of this inadequate success level in teaching critical reading, a number of possibilities come to mind. Some of these possibilities include the lack of agreement on what critical reading is, a hesitancy of some teachers or systems to deal with controversial issues, lack of training in the teaching of critical reading at the college pre-service level, or the fighting of educational "brush fires" at the lower comprehension levels (if a student doesn't comprehend literally, can he read critically?) These and many other possibilities exist. Hopefully, this paper will clarify some of the issues and possible solutions.

### Some Current Definitions of Critical Reading

An exhaustive listing of all current definitions of critical reading would be of limited value; however, an examination of a few may be helpful

in viewing the situation which exists. Consider the following:

"Critical readers are those who, in addition to identifying facts accurately as they read, engage in interpretive and evaluative thinking -- they project the literal meanings against their own background of experience..." (Pickarz, 1964).

"Critical reading...enables the reader to receive the ideas conveyed on the printed page,...to make them his own...(it) is independent thinking." (Kottmeyer, 1944).

"Critical reading is the process of examining...verbal materials in the light of related objective evidence, comparing the statement with some norm or standard, and concluding or acting upon the judgment then made." (Russell, 1956).

"Critical reading involves comparison of two or more sources of information...considering new ideas or information in the light of one's previous knowledge and beliefs...and the ability to detect and resist the influences of undesirable propaganda." (Harris, 1975).

The common thread running through all these is that critical reading requires thinking; it is not just a passive intaking of facts, but calls upon the reader to become actively involved with the reading material. Some writers, in fact, state that critical reading and critical thinking are synonymous terms (Follman, 1969; Shores and Saupe, 1953).

Other ideas noted in the definitions are that critical reading ability rests on previous experiences, pre-established standards or criteria for judgment, and the drawing of conclusions. Assuming all of these to be a part of the total fabric of the elusive "critical reading", it seems that the next step is a discussion regarding the reasons for trying to develop critical readers.

The Importance of Critical Reading

Why does general agreement exist regarding the desirability of helping readers learn to read critically? Why is so much print devoted to the topic? Society today, perhaps more than ever before, is being called upon to make evaluative judgments about many things which affect it now and which may affect it in the future. As a major receptive communication skill, reading is in the forefront of the total system of accumulating and evaluating information. It allows a more rapid procedure for receiving information than listening does, it allows for greater flexibility in reviewing material and comparing multiple sources, and it provides an opportunity to reflect on important points as needed. In addition to these obvious benefits, the sources of information requiring this flexibility, such as newspapers, are among the primary sources of information that should be considered critically. In a period where we need to reflect on the happenings of the past to improve the future, current events occur so rapidly that reflective thinking is frequently impossible. For example, our country has recently suffered through major political corruption, the revealing of secret information, a terrible winter, and a natural gas shortage. Citizens are presented with many and varied reasons why each of these things happened; how else is the responsible person to make judgments about each of these except through critical reading of all sides of each issue? A democratic society must depend on rational decision making by its members -- decisions on issues ranging from abortion to euthanasia. On a more daily basis, decisions need to be made regarding purchases of goods, investments of time and money -- the list could be extremely long.

Given these reasons, and others unmentioned, the importance becomes readily visible. The responsibility for encouraging and fostering critical reading and thinking skills lies within the province of all of us. We should not continue to think of literacy in its most narrow form -- word recognition and literal comprehension -- but should make a commitment to the development of these higher level skills.

#### Review of Related Research

Within the ideal situation described in the previous few lines, it is interesting to examine our success at this juncture; in other words, how well can our society perform now on critical reading tasks? This look at the research emphasizes, but is not exclusive to, studies done with college-age students, for they are the ones who most frequently must begin to assume their positions as responsible leaders in our society.

In the most recent figures on reading released by the National Assessment of Educational Progress (1976), it is stated that "The reading ability of 13 and 17 year olds changed little over a 4 year period. Both ages... (showed) a slight decline in inferential comprehension. Comprehension drops off quickly as reading tasks become more difficult." Farr, in the same report, says that "we need to find out if the decreases of the higher level reading skills...are real and what the possible causes are." (p. 3)

In an earlier study, Coles (1963) studied some 6800 students entering college nationally who were tested over their ability to read a short passage, evaluate the accuracy of that passage, and write a short essay explaining their position. Fewer than 1% of those tested were able to recognize "the propagandistic nature of the prose." It was concluded that the overwhelming majority know little or nothing about critical reading or thinking.

### Tests

Both of these studies do make the claim that their testing of the higher level comprehension skills shows deficiency; however, the testing was done in very different ways. The NAEP testing was performance on measurable objectives; the Coles study was based on 2 essay questions. Perhaps both are valid and reliable tests, yet attempts to interpret the critical reading research requires some knowledge of the instruments used. The most widely used critical reading tests are the Watson-Glaser Critical Thinking Appraisal (1964), Test of Critical Thinking (1951), and the Cornell Critical Thinking Test (1961).

The Watson-Glaser, in studies done with it (Follman and Miller, 1971), yields high total test reliability -- .66 to .77 -- but only moderate subtest reliability. The item discrimination is poor, in that the items do not discriminate consistently between good and poor critical readers. Also, the two forms, YM and ZM, are not parallel in difficulty. Scores on Form YM are consistently higher than on Form ZM, making pre- and post-test score differences difficult to interpret.

The Test of Critical Thinking and the Cornell Critical Thinking Test were also studied (Follman, 1971). Again, total test reliabilities were rather high (.54-.81), but subtest reliabilities were low. In summary, it appears that the total test reliabilities are satisfactory for the three tests, but research has shown subtest reliability and construct validity to be suspect.

### Instruction

There are many research studies on the teaching of critical reading skills, a few of which are examined here. These include instruction in such

skills as recognizing inferences, interpretation of literary devices and recognizing and analyzing arguments. One of the early studies using direct instruction was done by Glaser (1941). In this study, which began the research on the Watson-Glaser test, materials were designed to develop skills such as evaluating arguments and discriminating among inferences. Ten weeks of instruction with twelfth grade subjects found significantly better test scores for experimental group members.

In a study with 80 college students, Kemp (1963) found that an experimental group which received 10 hours of instruction in solving critical reading problems scored significantly higher on the Watson-Glaser than did a control group which received no instruction.

These studies, and others like them, point up the probability that critical reading can be improved at this level through specific instruction in such skills as problem solving, making judgments, and drawing inferences.

Some related studies in critical thinking and logic are also worth mentioning here. O'Brien (1973) reports a study in which college students were instructed in logical inference patterns. Results showed that, while post-test performance was improved over the pre-test, a consistent use of logic was not found in problem solving.

Shipman (1974) found in a study with graduate students that the teaching of how to judge the validity of verbal arguments was enhanced by translating verbal arguments to symbolic form, a sequence which is the reverse of that found in most texts on logic.

Another related area is one called value analysis. A technique advocated by many social science educators, its purpose is to help readers use logical thinking in dealing with social values issues. A frequently-cited study by Howland and Weiss (1951) used college students as subjects.



Each of four articles, attributed to a highly credible source, was given to half the subjects. The same four articles, attributed to a low credibility source, were given to the other half. Ideas attributed to the high credibility source were judged as "fair", and changes of reader opinion based on these ideas were  $3\frac{1}{2}$  times greater than opinion changes based on the low credibility source. The conclusion was that the credibility of the communicator is more persuasive than the ideas of that communicator.

The effects of authoritative testimony on the attitudes of 118 college students were investigated by Whitehead (1971). Two versions of a speech were given to experimental and control groups. One version had quoted material attributed to authorities, while the other version had the same quotations, but which appeared to be the speaker's opinions. Tests indicated that good critical readers in both groups gave no more credence to the authority quotes than to the speaker's opinion quotes; however, poor critical readers rated the speech with authority quotes much higher on content and impact.

Other studies have shown that personality variables such as dogmatism (Kemp, 1963), prior belief (Crossen, 1948), and attitude (Mehrley and McCroskey, 1970) affect ability to read critically.

#### Summary

To bring all this to a focus, then, what do we know about critical reading? The definitions remain tenuous and somewhat conflicting, largely because of the weakness in validity of current critical reading tests. Ability to read or think critically appears to be closely related to general mental ability, and may be dependent on literal reading ability.

Specific instruction in various types of critical reading skills with college-age students does affect performance on critical reading tests, leading to the conclusion that critical reading is a learned skill which can be taught. Further, it is an important trait in those who may serve to lead our society in the future. Given all the above, the next logical step is to determine ways and materials to aid in the teaching of critical reading skills for those who would try to teach those skills. Certainly the effort should be made.

## References

- American Council on Education. Test of Critical Reading, Form G, 1951.
- Coles, William. The Way Johnny Can't Read. AAUP Bulletin, 1963, 49, 240-242.
- Crossen, Helen. Effect of the Attitudes of the Reader Upon Critical Reading Ability. Journal of Educational Research, 1948, 42, 289-298.
- Ennis, R. H., and Millman, J. Cornell Critical Thinking Test, Form X, Cornell U., 1961.
- Follman, John. Factor Analysis of Achievement, Scholastic Aptitude, and Critical Thinking Subtests. Journal of Experimental Education, 1969, 38, 48-53.
- Follman, John and Miller. Statistical Analyses of Three Critical Thinking Tests. Educational and Psychological Measurement, 1971, 31, 519-20.
- Glaser, Edward. An Experiment in the Development of Critical Thinking. New York: Teachers College Press, Columbia University, 1941.
- Glaser, Edward and Watson, G. Watson-Glaser Critical Thinking Appraisal. New York: Harcourt, Brace, 1964.
- Harris, Albert. How to Increase Reading Ability, 6th Edition. New York: David McKay Company, 1975, p. 484.
- Hovland, C. I. and Weiss, W. The Influence of Source Credibility on Communication Effectiveness. Public Opinion Quarterly, 1951, 15, 635-650.
- Kemp, C. G. Improvement of Critical Thinking in Relation to Open-Closed Belief Systems. Journal of Experimental Education, 1963, 31, 321-23.
- Kottmeyer, William. Classroom Activities in Critical Reading. School Review, 1944, 557-564.
- Mehrley, R. S. and McCroskey, J. C. Opinionated Statements and Attitude Change and Source Credibility. Speech Monographs, 1970, 37, 47-52.
- O'Brien, T. C. and Shapiro, B. J. Logical Thinking in College Students. Educational Studies in Mathematics, 1973, 5, 71-79.
- Piekarz, Josephine. Attitudes and Critical Reading. Dimensions in Critical Reading, XI, University of Delaware, 1964, 134-144.
- Putney, Charles, editor. International Reading Association News. September 22, 1976.
- Rocchio, Daniel. A Review of Research on Critical Thinking and Critical Reading. Unpublished Doctoral Paper, University of Missouri-St. Louis, 1976.

Russell, David. Children's Thinking. Boston: Ginn and Company, 1956, p. 285.

Shipman, Jerry. The Development of a Curriculum Hierarchy for Use in Teaching Selected Principles...of...Critical Thinking. American Educational Research Paper, 1974.

Shores, Harlan and Saupe, J. L. Reading for Problem-Solving in Science. Journal of Educational Psychology, 1953, 44, 149-158.

Whitehead, J. Effects of Authority-Based Assertion on Attitude and Credibility. Speech Monographs, 1971, 38, 310-15.