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ABSTRACT

Underlying assumptions, enhancement procedures, and problems associated with the enhancement of critical reading were discussed. Empirical evidence was cited to demonstrate that critical reading could be defined as overlapping substantially with critical thinking and as sharing with critical thinking a very large verbal component, particularly vocabulary and reasoning and classifying activities. Documentation was provided to show that critical reading is a desired educational objective and also that critical reading can be developed. Approaches to enhance students' critical reading-critical thinking ability were cited: development of vocabulary ability; propaganda analysis; practice with verbal evidence, scientific methods, reasoning; practice in inferring beyond literal meaning; analysis of affective and value language; and games. Typical problems associated with the enhancement of critical reading-critical thinking were cited: inadequate vocabulary ability; reaction evoked by questioning, critical reading-critical thinking of traditional attitudes and values; lack of suitable materials; measurement and evaluation; effectiveness of different enhancement approaches; and transfer. (Author/NH)

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AND COLLEGE READING

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Underlying assumptions, enhancement procedures, and problems associated with the enhancement of critical reading were discussed. Empirical evidence was cited to demonstrate that critical reading could be defined. Critical reading was defined as overlapping substantially with critical thinking, sharing with critical thinking a very large verbal component particularly vocabulary as well as reasoning and classifying activities. Documentation was provided to show that critical reading is a desired educational objective and also that critical reading can be developed. Approaches to enhance students' critical reading - critical thinking ability were cited: development of vocabulary ability; propaganda analysis; practice with verbal evidence, scientific method, reasoning; practice in inferring beyond literal meaning; analysis of affective and value language; and games. Typical problems associated with the enhancement of critical reading - critical thinking were cited: inadequate vocabulary ability; reaction evoked by questioning, critical reading - critical thinking of traditional

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attitudes and values; lack of suitable materials; measurement and evaluation; effectiveness of different enhancement approaches; transfer. Finally systematic, explicated critical reading enhancement and investigation efforts were recommended.

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My charge in preparing this paper was to discuss critical reading and college reading.

In discussing any construct such as critical reading it is necessary to explicate the underlying assumptions. In this treatise three assumptions will be discussed.

The first assumption is that we know what critical reading is or else that we can define it.

The second assumption is that it is desirable for students to read critically.

The third assumption is that critical reading can be taught, enhanced, improved, facilitated, in one or more ways.

We will initially discuss the first assumption, the definition of critical reading. There has been a plethora of opinion, theoretical articles in which critical reading has been defined. These definitions range from critical reading defined as one variable to critical reading defined as a composite of variables. The consequence of this surfeit of definitions is the considerable confusion that surrounds the concept, as

King, Ellinger, and Wolf noted.<sup>1</sup> Smith<sup>2</sup> likewise stated that critical reading is the area in reading skills in which confusion is most apparent. The basic reason for the confusion concerning the definition of critical reading is the lack of research.

The problem of the definition of critical reading is currently under systematic investigation by the writer and colleagues. The objective of this research program is to attempt to determine the definition of critical reading through inferences from correlations and factor structure of critical reading, critical thinking, reading, language and other ability and achievement tests on two levels, fifth grade and twelfth grade. Preliminary findings (Follman, Lowe, Johnson and Bullock;<sup>3</sup> Follman, Lowe, Johnson, and Miller;<sup>4</sup> Follman, Lowe, and Wiley;<sup>5</sup> Follman, Wiley, Lowe, and Miller<sup>6</sup>) indicate evidence for the existence of the construct of critical reading; evidence of considerable overlap between critical reading and critical thinking, evidence of large overlap between critical reading - critical thinking and language ability particularly vocabulary, and also reasoning, classifying, etc.

These findings are consistent to a considerable extent with the findings of Wolf<sup>7</sup> who factor analyzed a

matrix of inter-item phi coefficients of the Ohio State Critical Reading Test, a test representing reading experts' judgment of the definition of critical reading. Wolf<sup>8</sup> found the test, and inferentially critical reading, to consist of a number of different small group and specific factors rather than one overall factor or ability. Identified were four small group factors including literary analysis, comprehension of underlying elements, logical analysis, inference, and a considerable number of specific factors including finding differences in details, checking validity, checking faulty inferences, analyzing structure, etc. The finding of the critical reading test to measure a number of group and particularly specific factors parallels the finding obtaining in a similar study of critical thinking (Follman<sup>9</sup>) in which critical thinking was defined as a complex of small group factors. Factors identified therein were recognition of assumptions, relevance of evidence, fine distinctions about the truth or falsity of inferences, judgments if conclusions follow, judgment about the certainty with which predictions follow, judgments if conclusions follow, and certainty of judgment about the degree to which conclusions follow. These factors appear to overlap substantially with some of Wolf's<sup>10</sup> factors, particularly logical analysis, in-

ference, differences in details, checking validity, analyzing structure, among others.

Additional empirical research testing the relationships indicated above should provide at the least an operational definition of critical reading, one that initially is amenable to research, and one that perhaps ultimately will become a veridical one, and finally a definition that can be used by teachers, reading instructors, etc.

The second assumption, that students' critical reading and/or critical thinking should be enhanced, is documented in reviews by Follman,<sup>11</sup> Glaser,<sup>12</sup> and Wolf, et al.<sup>13</sup> The currency of critical reading is evidenced by the fact that the March, 1970 issue of the Grade Teacher<sup>14</sup> includes five articles on critical reading. It therefore seems reasonable to conclude that students' critical reading - critical thinking ability has been and is seen as a desirable educational objective.

The third assumption, that critical reading - critical thinking can be taught, improved, enhanced, etc., is evident from scores of research and opinion articles in professional journals and also from reviews by Harcourt, Brace, and World,<sup>15</sup> King, Ellinger and Wolf,<sup>16</sup>

Smith and Roser<sup>17</sup>, and Socher<sup>18</sup>.

Thus far it has been established that an empirical definition of critical reading is available, that students' critical reading is desirable, and that students' critical reading can be improved.

The balance of this paper will be a discussion of procedures designed to implement critical reading in students, <sup>a discussion of</sup> and also some of the problems associated with the implementation of critical reading and thinking.

Initially vocabulary knowledge must be enhanced since nearly all materials in which critical reading and critical thinking have been implemented are verbal, vocabulary activities typically statements or questions. Additional evidence of the importance of vocabulary is that it seems to be a threshold variable both for the appearance of critical reading - critical thinking and also for its in-depth manifestation. Implementation procedures for the enhancement of vocabulary development will not be discussed here since that is a massive undertaking suitable for several such articles. It is noted however that nearly all college reading manuals have vocabulary development sections and that reading per se is probably the most pleasant and profitable way to increase vocabulary. Finally the importance of vocab-

ulary development for critical reading and thinking can not be stressed too strongly.

There have been a number of approaches to the enhancement of critical reading - critical thinking which have been applied in part and/or in total.

A frequently used approach is propaganda analysis usually of either political material or advertising material although many texts, opinion and theoretical journal articles are admirable sources.

A second commonly used approach particularly in the 1930's, '40's, and '50's was student experience with one or more aspects of use of verbal evidence, recognition of assumptions, judgments whether conclusions follow, etc. A correlative kind of activity was student experience with one or more aspects of the scientific method, i.e., identification of hypothesis, interpretation of data, relation of evidence to conclusion, etc. Another correlative activity was student experience in inductive and/or deductive reasoning.

A third general approach used by many reading teachers is student practice in reading between the lines, attempting to determine author's purpose, seeking main ideas, etc.

A fourth general approach is systematic student

experience with affective and value words and language.

A fifth general approach, relatively new, is the games approach to certain types of learning situations. Examples are WFF'n PROOF; simulation games in social studies, economics, management; propaganda games; etc.

In addition to these general approaches college reading teachers have their own approaches to the enhancement of students' critical reading many of which are similar to the approaches articulated herein while many are different with some probably unique.

Some common problems to the enhancement of students' critical reading will now be cited. As has been indicated the main obstacle is students' inadequate language ability particularly vocabulary knowledge. Since most if not all critical reading activities occur in language contexts verbal ability particularly vocabulary knowledge is a sine qua non.

A second problem is that the enhancement of students' thinking in general and critical reading - critical thinking in particular may very well concurrently induce students to question traditionally held attitudes and values. When students or other significant groups question prevailing values and particularly when they react overtly they often evoke a counter reaction

from entrenched interests representing varied positions on the political and power spectrums.

Another problem posed by some is the alleged lack of materials suitable for the enhancement of students' critical reading and critical thinking. It is not seen here that this is a serious problem especially as there has been no research evaluation of materials designed to enhance critical reading - thinking, and also because there is a plethora of appropriate non-text and non-trade materials. Newspaper editorials, advertisements, conventional textbooks and journal articles, political materials, news reports, are types of non-text sources.

Another problem is the measurement and evaluation of various approaches to the improvement of critical reading. This problem has been compounded in the past by the limited knowledge about the definition of critical reading.

A fifth problem, somewhat artificial considering the amount of research and corollary state of knowledge re critical reading, is effectiveness and efficiency of various approaches to the enhancement of critical reading.

Another problem even more artificial and esoteric than the effectiveness and efficiency problem is transfer.

Does in fact competency in critical reading learned in one situation such as in a particular course or study improvement program transfer to other learning and real life situations.

In closing none of these problems is seen as insurmountable. Consequently it is suggested that systematic, operationally defined, precisely articulated and described enhancement efforts and particularly empirical investigations of critical reading be conducted.

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