ABSTRACT

The relationship of reading ability to passing the Interpretation of Reading Materials sections in social studies, science, and literature of the General Education Development (GED) test is assessed in this paper, and procedures for developing reading skills related to the test are suggested. Information about types of questions asked, instructional programs that have proven to be most successful in New Jersey, and tests that correlate with the GED test are included. In addition, instructional methods and samples of teacher-made lessons in successful high school equivalency programs are described. Although most GED preparatory programs emphasize content area instruction, instruction in reading skills is of greater importance in enabling clients to pass the GED test and hence to obtain a high school equivalency certificate. (TO)
"Reading and the High School Equivalency Program"

Adult Reading

For the majority of people High School Equivalency (HSE) is synonymous with the General Education Development test (GED),--a battery of five tests which includes Correctness and Effectiveness of Expression, Interpretation of Reading Materials in Social Studies, Interpretation of Reading Materials in Science, Interpretation of Literary Materials, and General Mathematical Ability. The three reading interpretation tests will be emphasized in this paper. The importance of reading ability in passing the three tests and the use of a structured lesson to develop the reading ability of HSE students is discussed.

Last year in New Jersey 18,000 people took the GED test; of that number 13,000 passed. For those who took the test as well

*Figures supplied by the Office of High School Equivalency State Department of Education, Trenton, New Jersey.
as for the 22,000 people who enrolled in HSE classes and their teachers the prevailing assumption seems to be that the GED tests one's knowledge of social studies, science, and literature. For example, one student who wrote to a program after passing the test recommended that instruction be provided in those three content areas. Teachers who have been observed or who participated in teacher-training workshops expressed concern over the lack of curriculum guides for social studies, science, and literature.

Yet, a recent perusal of the three reading interpretation tests (Form GG) by a representative of the Office of High School Equivalency of the N.J. State Department of Education confirms what can be inferred from the test titles—that the tests do indeed stress reading comprehension in specific content areas.

To determine the emphasis on reading skills each question in the three reading interpretation tests was categorized as either literal, inferential or critical. These categories were defined as follows:

1. Literal refers to questions which could be answered from information directly stated in the reading selection. Often, the information is stated slightly differently in the question and answer choices.

2. Inferential questions include those which could be answered from different pieces of information located in various places in the selection.
The reader is required to locate and then put the bits of information together. These questions might be sub-categorized as generalizing, drawing conclusions, inductive reasoning, predicting outcomes or by other comprehension labels reading teachers use. On some tests, especially the one in literature, vocabulary meaning questions answered from context are classified as inferential.

**FIGURE 1**
**ANALYSIS OF FORM GG**

**INTERPRETATION OF READING TESTS**

<table>
<thead>
<tr>
<th></th>
<th>Literal</th>
<th>Inferential</th>
<th>Critical</th>
<th>Charts &amp; Graphs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Studies</td>
<td>30%</td>
<td>45.3%</td>
<td>6.7%</td>
<td>17.3%</td>
</tr>
<tr>
<td>Science</td>
<td>41.5%</td>
<td>30.8%</td>
<td>17%</td>
<td>17%</td>
</tr>
<tr>
<td>Literature</td>
<td>10%</td>
<td>56%</td>
<td>34%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Vocabulary</th>
<th>Poetry</th>
<th>Play</th>
<th>Shakespeare</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literature</td>
<td>33.7%</td>
<td>25%</td>
<td>6%</td>
<td>7.5%</td>
</tr>
</tbody>
</table>

3. Critical questions were those that require a knowledge of content not included in the selection or the application of information in the selection to another given situation. These questions most often require a knowledge of subject-related
vocabulary wherein the reader would have to know the meanings of the words to answer the questions.

In addition to these types of questions, the social studies and science tests required some ability to read graphs and to compute simple arithmetic. On the literature test there are several questions related to poetry, plays, or Shakespearian passages. Although these questions are classified as literal, inferential or critical, persons taking the test might consider them more difficult because of the selections they refer to.

A close look at Figure I shows that on all three of the tests over 65% of the questions are of the literal and inferential type and are therefore answered from information included in the test itself.

**FIGURE II**

<table>
<thead>
<tr>
<th>Test</th>
<th>Total test items</th>
<th>Raw Score Equivalent to a standard score of 45</th>
<th>Literal and Inferential Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Studies</td>
<td>75</td>
<td>38</td>
<td>75.3</td>
</tr>
<tr>
<td>Science</td>
<td>65</td>
<td>34</td>
<td>72.8</td>
</tr>
<tr>
<td>Literature</td>
<td>80</td>
<td>40</td>
<td>66.3</td>
</tr>
</tbody>
</table>

percent number
Figure II illustrates that the number of questions that can be answered from information provided in the selection in every case exceeds the number of questions needed to get a standard score of 45.*

Of the questions that cannot be answered directly from the test, vocabulary peculiar to a specific field is the main input needed from outside the selection. The literature test in particular requires more specialized vocabulary than the other two reading interpretation tests. The primary content knowledge needed in addition to vocabulary is a general familiarity with topics that are included in an overall subject area, broad concepts of that area, and an ability to apply knowledge to other situations. With a general understanding of a content area and knowledge of the most common terms, a person with good reading skills can pass the GED test.

Unfortunately, many of the people who want to take the test or who enroll in preparatory classes to study do not exhibit adequate reading ability. The questions for the personnel of these programs are:

1. What is an adequate reading level for a person to pass the test?
2. What is a good predictor to determine if the student is ready to take the GED test?
3. How do I prepare the student if he is not ready?

In response to question 1, past experience with students preparing for and then taking the test indicates that a reading minimal standard score of 35 with an average of 45 is needed in New Jersey to qualify for a HSE certificate.
ability of approximately a tenth grade level, but preferably higher, as measured by the California Test of Adult Basic Education (TABE), Level D, (Tiegs & Clark, 1967) is desirable. Since carefully controlled correlation studies are difficult to find, the N.J. Office of HSE is currently computing data that would provide a more reliable figure. However, any figure quoted derived either from observation or statistical computation is subject to misinterpretation by others. People have been known to score lower on the TABE and pass the GED, or to score higher and fail. Any generalized score is a guide to be interpreted in conjunction with other data and experience with the student. Generally, the better a student's reading ability the better his chance of passing.

Recently, data regarding a good predictor for judging a student's readiness for the GED test has been collected. Subtests 3, 4, 5, 6, and 7 of the Iowa Test of Educational Development (ITED) Form x-4 or y-4 (Lindquest and Feldt, 1960) have been reported to correlate very highly with the GED. Generally, a student who obtains a standard score of about 13 on these 5 subtests can obtain an average standard score of 45 on the GED. (High School Equivalency Guidelines, 1972) In addition to its predictive value the ITED provides good practice for students since it is very similar in format and structure to the GED test. (It must be noted that the ITED is best administered when the student demonstrates through a reading test and actual work, that he may be ready to take the GED.)
The problem, however, is not with those who read well or who attain a score of 13 on the ITED. Most people entering a GED preparatory program do not exhibit such high scores. Although they may have completed a goodly number of years in school, their actual functioning ability in reading, math, and language skills is usually lower than could be assumed by that number. Often they are severely handicapped in reading ability. The students themselves realize their weaknesses or they would not have come for assistance.

It is unfortunate that many students who attend HSE preparatory classes do not receive adequate instruction because of the misconceptions they and the personnel in those programs have about the GED test. A cram course in social studies or continual drill in a HSE review book is not adequate. This is not to say that people who have received such instruction do not pass the test, but that students who enroll in preparatory classes need and deserve help in developing skills they cannot develop on their own. Drill and review books can be purchased for $3.95 in a book store and used by students on their own time.

From the above discussion it should be apparent that people studying for the GED test need reading instruction in three specific content areas. For many students and teachers a directed reading lesson (DRA) is an adequate model to use when planning a lesson for HSE students. However, for other students who have been out of school for many years, who never did well while in school, who exhibit serious reading deficiencies or who fail to demonstrate growth after several months of instruction, more guidance is needed.
Harold Herber's (1970) model for teaching reading in the content areas stresses increased structure and has several theoretical bases to justify its use with HSE students. Firstly, Herber's reasoning guides emphasize the provision of an organizational structure into which the reader fits the information. Such a structure is needed by adult students who are unable to determine how to arrange information in paragraphs so as to answer the questions that follow. Secondly, Herber builds into his model an emphasis on vocabulary instruction that requires the student to determine word meanings on his own, rather than simply review meanings prior to reading in a group activity. Thirdly, an integral step in Herber's model is going back to the article and underlining information that helps answer the question. This would be particularly helpful to GED candidates in selecting correct answers. Fourthly, Herber structures his reasoning guides so as to separate the literal, inferential, and applied or critical reading questions, thereby assisting the GED student in seeing the differences among types of questions. All of these question types have parallels on the GED test.

The focal point of Herber's approach is that the teacher "must show the learner how to do what is required of him and do it in such a way that he develops an understanding of the process" (Herber, 1970 p.v.)

A three-step process of preparation, guidance and independence which should lead to a transfer of the desired behavior to
unguided situations constitutes his method. The preparation stage provides a total organizational structure into which the reader fits the information. Initially this is a physical or format arrangement which assists the student in organizing and comprehending. Important details are identified, ideas are restated, and applications are specified by the teacher. The student is required to relate underlined and coded information in the passage to literal statements given prior to his reading of the selection. He must then use the literal information to justify his answers to inferential and applied (critical) statements. The teacher's job is to extract the organization of the selection and structure it in such a way that students will understand. If the teacher considers it necessary, an additional guide for vocabulary development can also be included.

The next step is partial guidance. During this phase the student must code and underline the information in the text himself. That is, he must receive the structure of the guides, then go to the text, pick out, underline, and code the information necessary to complete the guide. The job of relating the underlined information to the guides remains intact. Following this stage is independence. During this phase the guide becomes more like a selection with multiple choice questions. The primary difference between this and any reading selection with multiple choice questions following it is that the reader still must select the information in the text which supports his answer choice. The step of discussing and comparing answers with other students is also retained and is integral to all three stages. Clearly this method emphasizes study rather than drill or speeded reading. By following
Herber's structure or by extracting parts of it, the student can be guided to the point where he will be able to handle drills without expending all the time necessary for completion of a guide.

This method requires quite a bit of time for the teacher to prepare a complete guide—and time is a rare commodity for part-time GED instructors. For those teachers, the preparation and use of one full guide each week and the use of some of the steps of the guide with other reading selections would be well-worth the extra preparation time necessary. A perusal of the test by the N.J. Office of HSE indicated that among the skills a person actually taking the test needs are the following:

1. the ability to define words in context.
2. the ability to identify the type of question asked.
   i.e. vocabulary, main idea, inference, detail.
3. the ability to generalize from given details. "(We can infer from. . . .that. . . .)."
4. the ability to analyze alternative answers so as to determine why the other choices are wrong. Students should be able to locate information in the passage that is needed to answer a question.
5. the ability to answer questions that refer to specific lines in a passage.
6. the ability to identify information that has been restated. Many of the literal questions contain information that is stated slightly differently than it is in the selection.
7. the ability to apply information from the selection to another given selection.

Herber's reasoning guides incorporate practice in these skills and are thus, related to actual performance on the test.

In conclusion the validity of the GED as an indication of a person's proficiency must be emphasized. For many years a person who has passed the GED test has been considered less than equal in knowledge and ability to a person who has received a regular high school diploma. But today, when students are suing school systems for not enabling them to read on a specific level, where high school graduates cannot read or need remedial assistance in college or training programs, the ability to pass the GED test may be a better indication of a person's ability than a high school diploma. A recent follow-up study of people who passed the GED test with a score of 50 or more, then went on to take the College Level Examination Program (CLEP) and subsequently became juniors at a four year college deserves mention. When compared to regular junior year students who entered and proceeded through college in the usual manner, the mean grade point average (GPA) of the GED-CLEP juniors was 3.25 compared to a mean GPA of 2.8 for all other juniors. Granted, other variables were present but this study does indicate that GED graduates should not be considered second best. The GED is a viable alternative for people who want access to jobs or training which requires a high school diploma. When such people seek assistance in preparing for the GED test, they deserve the
kind of instruction that will best enable them to pass the test and gain the social and personal status they want.
REFERENCES


*High School Equivalency Guidelines.* Trenton, New Jersey: Division of Field Services, Office of High School Equivalency.
