

DOCUMENT RESUME

ED 133 697

CS 003 138

AUTHOR Steele, Jeannie L.; Laffey, James L.
 TITLE Implementing and Evaluating In-Service Programs for Content Teachers.
 PUB DATE¹⁴ 76
 NOTE 42p.; paper presented at the Annual Meeting of the International Reading Association Southeastern Regional Conference (4th, Jacksonville, Florida, February 18-21, 1976); Not available in hard copy due to marginal legibility of original document

EDRS PRICE MF-\$0.83 Plus Postage. HC Not Available from EDRS.
 DESCRIPTORS *Content Reading; Educational Research; Higher Education; Inservice Programs; *Inservice Teacher Education; *Integrated Activities; *Reading Instruction; *Teacher Developed Materials

ABSTRACT

The importance of inservice training in the field of reading instruction, especially for secondary-level teachers in the content areas, is clear. Teachers must become personally involved with the reading task and must be provided with time to prepare and evaluate instructional materials. In order to assess the effectiveness of teacher-developed strategies for integrating reading into the other subject areas, five high school teachers and one junior high teacher participated in a study conducted at Montevideo High School, Rockingham County School System, Virginia. Participants designed and developed materials such as study guides, structured overviews, skills-teaching formats, and vocabulary extension programs, for use in their subject areas. Evaluation of these materials by both teachers and students indicated a high level of satisfaction with their use. In addition, on attitude testing following the study, teachers revealed a more positive understanding of the relationship between the teaching of reading skills and students' ability to grasp the textual material in the content areas.
 (KS)

 * Documents acquired by ERIC include many informal unpublished *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. *

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

IMPLEMENTING AND EVALUATING IN-SERVICE
PROGRAMS FOR CONTENT TEACHERS

by

Jeannie L. Steele and James L. Laffey

PERMISSION TO REPRODUCE THIS COPY
RIGHTED MATERIAL HAS BEEN GRANTED BY

Jeannie L. Steele

James L. Laffey

TO ERIC AND ORGANIZATIONS OPERATING
UNDER AGREEMENTS WITH THE NATIONAL IN-
STITUTE OF EDUCATION. FURTHER REPRO-
DUCTION OUTSIDE THE ERIC SYSTEM RE-
QUIRES PERMISSION OF THE COPYRIGHT
OWNER.

What do we know about inservice education from past research?

While the literature in reading contains numerous descriptions of in-
service programs, little research has been conducted on it. Even though the
research has been sparse, it has produced some interesting findings.

Austin and Morrison (1963) conducted a nationwide survey which examined
ways school systems have attempted to increase teacher knowledge and improve
teacher performance in reading instruction. The investigators concluded
that many improvements in programs in reading were needed. Their
recommendations included the following: (1) that teachers be provided
released time; (2) that participants be involved in planning the program;
(3) that group size be limited; and (4) that case studies and audio-visual
aids be used to make the learning more realistic.

Another study by Adams (1964) attempted to analyze teacher responses to
a questionnaire designed to discover teachers' instructional needs in read-
ing. Two hundred and sixty-eight, randomly selected teachers from fifty-two
randomly selected schools in Florida responded. The respondents identified

28 areas in which greater understanding was needed. The greatest need occurred in diagnosis and treatment of remedial reading problems and ways to meet individual student differences.

In an attempt to develop guidelines for improving preservice and in-service training, Smith, Otto, and Harty (1970) surveyed 225 elementary teachers. Responses were classified on the basis of each respondent's present teaching level (primary or intermediate). The researchers found that primary teachers were more satisfied with their preservice training than were intermediate teachers. They also discovered that teachers with more years of experience rated their preservice education higher than less experienced teachers. This finding may reveal the inadequacy of retrospective research techniques more than anything else. In the same study, the areas of greatest felt need were in agreement with Adams' (1963) findings, i.e., providing for disabled readers and meeting individual instructional needs.

The growing body of literature in reading indicates that comprehensive reading programs at the secondary level should include reading instruction in subject matter areas. However, most secondary teachers have not had preservice training in the teaching of reading. Smith and Otto (1969) conducted a personal reading improvement course for secondary teachers. The stated purpose was to improve the reading abilities of the participants. The investigators also felt, however, that the course would be a way to convince secondary teachers that reading instruction is appropriate beyond the elementary level. The techniques used by the teachers to improve their own reading skills could be applied in the secondary classroom. Nineteen junior and senior high school teachers volunteered for the course. The participants were pretested with a standardized reading test and an attitude inventory. The inventory assessed the teachers' attitudes toward reading instruction in the content areas. The same inventory was used in a post test along with another form of a standardized reading test. The participants scored higher

on the posttest in reading ability but there were no positive changes in attitude toward reading instruction in content areas. This finding seems to illustrate that unless teachers are given specific instructional tools to be used in a classroom content reading instruction, they will not change their reading attitude toward reading instruction in that area. One week after the conclusion of the course, however, thirteen participants indicated on a questionnaire that they felt they were better able to improve students' reading because of the course. Eleven reported they were now willing to include reading instruction in their instructional programs.

Most of the research dealing with inservice programs in reading describes inservice projects with elementary teachers. It has been recommended by Moburg (1972) that research efforts in inservice education be expanded to include programs and problems in reading at the secondary level. Nevertheless, some research concerned with elementary school teachers revealed findings pertinent to secondary school reading programs. Goodacre and Clark (1971) compared the responses of Scottish and English teachers of first and second grade students. These researchers questioned the teachers on classroom practice, professional preparation and teaching problems and inservice requirements in reading. The results of this study revealed that 47% of the Scottish teachers and 21% of the English teachers claimed that they were dissatisfied with their preservice training while only 15% and 10% respectively expressed satisfaction. In identifying topics of interest for inservice work, the majority requested aid in dealing with retarded readers.

In a report which reviewed teacher training in reading instruction, Harris (1973) identified reasons for the failure of some inservice programs as follows: (1) lack of personal involvement on the participants; (2) a passive role for the teacher; (3) lack of feedback to participants about what they could do to better their efforts; and, (4) purely verbal outcomes with nothing concrete (i.e., useful instructional materials or teaching

techniques and skills) to take back to the classroom. Harris cited a number of recent trends as having promise for the improvement of inservice training. They include clarification of objectives to be achieved, and efforts to develop evaluative procedures which measure knowledge and practical competency.

Why is there a need for teacher inservice education?

Importance of the teacher

Authorities point to the important role of the teacher in teaching reading. Harris (1973) cites the announced failure of many federally funded projects for raising the reading performance of the disadvantaged (including Title I projects and performance contracts) has demonstrated again the importance of the teacher in the instructional process.

In the area of reading instruction the teacher has been identified as the crucial variable in the success or failure of the program. Moburg (1972), in an intensive analysis of inservice education, identified important assumptions with regard to teacher success in reading instruction. To a great extent the quality of the teacher's professional preparation determines whether the teacher will be successful. A teacher's preparation should consist of a continuous program of inservice instruction as well as preservice course work. Regardless of the quality of preservice programs, the latter are inadequate to maintain the teacher on the job.

The changing role of the teacher

There is much confusion about the role of the content teacher in teaching reading. The cliché, "Every teacher a teacher of reading," has been interpreted by content teachers to mean the teaching of an entire curriculum of reading skills as the reading teacher would do (Herber, 1970). Content teachers already laden with pressures to expand their own curriculum have rejected this role. Herber believes that content area teachers are right in their rejection of this "reading teacher" role in their approach to their students' problems in reading and understanding their text. Rather,

he invites teachers to employ an integrated approach in which the teacher teaches the reading skills as they are needed for the student to read and understand the content of their textbooks.

There is a need for a whole new strategy in teaching reading through content areas, a strategy that uses what we know about the direct teaching of reading but adopts that knowledge to fit the structure of and responsibilities for the total curriculum in each content area. (Herber, 1970, p. 11)

The need for teacher inservice training is especially evident when the teacher is being asked to be more than an "information dispenser". The teachers' role in teaching reading is changing and the teacher must be equipped to meet the changing role. He is challenged to emphasize the means for acquiring, interpreting, and using knowledge independently. Indeed, to make his students "independent learners," as Herber suggests, the teacher must be shown how to do these things.

Whether the learner is a student or his teacher, the learner must be shown how to perform the behavior requested of him; admonitions will not bring about the desired change. (Herber, 1970, p. viii)

Many educators believe that reading instruction is most effective when it is integrated into the curriculum, i.e., when the normal subject matter of the school curriculum is the content of the integration and reading as a language activity is the process of the integration. Although the teaching of reading and evaluation of proficiency in content areas are at present not well developed, there are those who believe as Niles suggests that:

We are moving gradually toward a time when reading will be taught mainly in the subject fields with regular content materials and regular daily lessons of the course. It should never have been otherwise. (Niles, 1965, p. 36)

According to Herber (1969) the content teacher has two major responsibilities with respect to the curriculum. First, one must teach content (i.e., a specific body of knowledge). This content includes information which students acquire and concepts which are formed from seeing the information and its sets of relationships. Secondly, one must teach process

(i.e., the reading and thinking skills necessary to acquire the information and apply the concepts).

The content area teacher is principally concerned about the information and concepts contained in his curriculum. Nevertheless, the teacher also can teach students how to acquire the information and ideas from an assigned selection. To do this, however, the teacher must carefully examine each assignment in the text to determine the processes by which the students obtain the information and form the concepts. The content teacher can then show the students how to apply those processes he has identified.) The apparent conflict between the teaching of subject matter and the teaching of reading is not a conflict at all if one views reading as a means and not as an end. Reading is a process, through which the ideas of a discipline are learned.

Specific assumptions underlie this perspective of the nature and purpose of reading in content areas. These assumptions are:

1. The teachers in subject matter classrooms are interested in practical solutions to their students' problems and in practical methods to increase their own efficiency.
2. Students need varying amounts of help ranging from the development of basic skills in reading to the formulation and application of abstract concepts.
3. Each student possesses different styles and abilities with regard to "the reading-to-learn process" (the reading and thinking and other activities necessary for the acquisition and application of content).
4. The needs of students can be met if instruction is designed to meet their needs; their needs are not met accidentally or incidentally.
5. The most logical place to provide needed instruction is in the subject areas in which the students' needs are manifested.
6. The most logical person to provide this instruction is the teacher of the subject in which the students are experiencing difficulty.

7. "That the content of material determines the process by which it is read. That is to say, the ideas to be acquired dictate the manner in which the reader should respond to the material to ensure their acquisition." (Herber, 1969, p. 3)

8. There should be a simultaneous teaching of content and process. This should be done by guiding students in the application of process so that they understand both it and the content.

9. For integration of reading into the secondary curriculum the subject matter is the content of that integration and reading as a language activity is the process of that integration.

These assumptions state and restate the idea that when we talk about the integration of reading into the secondary curriculum, we are saying that the normal subject matter of the school curriculum is the content of that integration and reading as a language activity is the process of that integration. This fusion of content and reading makes inservice programs for the subject matter teacher in the secondary school of extreme importance because the content teacher is at the cutting edge of the fusion of content and reading.

Inservice programs for the content area teacher should prepare the teacher to meet the challenge of their "changing role" and integrate the teaching of reading with content.

Lack of Preservice Education in Teacher Training.

When teachers are graduated from accredited institutions and awarded state certification it is often assumed that they possess at least minimal understanding of how to teach reading. Research indicates that this certainly is not the case! Roeder and Eller (1973) conducted a study to ascertain the number of four year colleges and universities in the U. S. that required education students to take at least one teaching of reading course. They received usable responses from 860 schools which offered accredited elementary sequences and 972 from secondary education schools.

At the elementary level 89% required at least one course in reading. But at the secondary level 80% of the colleges and universities did not require a reading methods course. At the junior high level 70% did not require a reading course.

It is interesting that as early as 1961 the Harvard-Carnegie Study recommended "that a course in basic reading instruction be required of all prospective secondary teachers," (Austin, 1961). Unfortunately, as the research indicates, it appears that the colleges and universities which train prospective teachers have done little to implement necessary steps to prepare the secondary teacher to meet the continuing needs of their students in reading.

The certification boards of states, as well as colleges, must assume much of the responsibility for the lack of preparation of secondary teachers for the task of teaching reading. A study of state certification requirements conducted by Bader (1975) determined the extent to which states were requiring secondary teachers to take reading courses. The results indicate that 35% of the states require secondary reading preparation for certification. Although this figure is far below what is desirable, it does show an encouraging trend when compared to the earlier findings of Estes and Piercey (1973). Bader asserts that the number of states she found that required secondary reading courses "is an increase of 100 percent over the study completed in 1973," (Bader, 1975, p. 237). It is interesting to note that the 1975 study reported that 55% of the state certification boards either have or are considering a reading requirement for secondary teachers. The Bader study seems to indicate that the state boards are responding to the increasing demand for accountability in the area of reading.

Assuming that the teacher shortage is over for some time to come, the time is right for upgrading professional standards to undergraduate preservice programs and improving state certification requirements. Local

school boards can and should become more selective in appointment of only qualified teachers. Hopefully, then, the teaching professional would not be embarrassed by findings such as those of a study by Geeslin and York (1970-71). The findings of this study indicated that some teachers assigned to inservice possessed only minimum functional literacy skills themselves. The evidence also revealed that some participants in teacher training institutes functioned at reading levels that were barely literate. These findings indicate the necessity for strict evaluation of persons completing preservice teacher training and applying for state teacher certification.

Summary and Conclusions

The importance of inservice training, especially for secondary teachers, is clear. In view of the need for inservice training it becomes increasingly important that the inservice be exemplary in nature. Those in positions of leadership in inservice workshops should learn from studies of past training and design workshops which truly meet the needs of the participants.

We have established that teachers as well as students must be shown "how to" do what is expected of them. They must become personally involved with the learning task. They must also be provided with adequate time to prepare concrete materials for use in their classrooms. After the initial use of materials and ideas encouragement should be given to field test the ideas, activities, and instructional tools in classroom settings. The ideas, instructional tools, and activities should be evaluated by students and teachers. Appropriate changes should be made when they are needed.

Inservice education should provide reasons from a practical point of view for the classroom teacher to put forth effort to prepare the instructional tools and activities. One effective way this can be accomplished is for the instructors to demonstrate or "model" behaviors in the inservice training they wish the teachers to incorporate in their individual classrooms.

The remainder of this paper is a descriptive and evaluative study of an inservice workshop which the authors feel to be exemplary in nature. The workshop was designed to train teachers to integrate the teaching of reading into the secondary school curriculum.

More specifically this study will explore the effects of the application of specific strategies of teaching reading in content area classes. These strategies were taught and the resulting tools designed in an inservice workshop. A primary objective of the study was to discover through opinionnaires, observations and self reports, the effect of teaching reading in content areas on teacher preparation, teacher diagnosis of students' abilities, changes in teacher attitudes, and students' attitudes toward this integration of reading into the content area class.

Specific questions which we will deal with in this report are:

1. What will teacher and student attitudes be toward the integration of reading in the content areas?
2. Will teachers be better equipped to diagnose students' strengths and weaknesses in reading the material of their subject after a workshop dealing with the integration of reading into the secondary curriculum?
3. Will teachers be better prepared to meet the individual needs of the students in the acquisition of skills.

vocabulary, and concepts of subject matter areas after the inservice workshop?

Strategies for Integrating Reading in the Secondary School

In this section the literature and research dealing with particular strategies used to integrate reading in the curriculum will be reviewed.

In identifying these specific strategies we do not mean to imply that they are the most important or the only tools or strategies available. Rather these particular strategies were specifically evaluated at the conclusion of the workshop therefore, it is felt that their description at this point in the study would be helpful. Many other strategies for integrating reading in the content area were included in the workshop. Eighteen titles of the teaching-learning modules containing different strategies are listed later in the actual description of the inservice workshop.

Study Guide. Content and process are the two important elements in the curriculum. As defined earlier, content is the information, ideas, and concepts which make up an area of knowledge while process refers to reading and thinking skills necessary to acquire the content. Some reading authorities believe that improved understanding of content and facility with process is an objective of student learning and to accomplish this objective a student must be guided by some structure which stimulates an understanding of content and an application of process. The development and use of study guides is as much a philosophy of teaching as a specific teaching practice (Earle, 1969). They can guide the simultaneous development of skills and concepts, in the classroom, under the direction of the regular teacher. They are applied to regular course content and texts with

students exhibiting all ranges of abilities.

The literature indicates that study guides have proved valuable in various ways. Earle (1969) reported that both teachers and students reacted favorably to their use in a small school in a rural area of central New York. Durrell (1956) reported improved comprehension and retention and increased interest and attention to study tasks when study guides were used. On a standardized test measuring physics content, Herber (1964) found statistically significant differences in favor of students who used study guides. In comments on this study, Herber stated:

Above average students, in advanced classes, can benefit from instruction in reading related to their subject content. There is more to reading than recognizing words, identifying and memorizing facts. It is at the more sophisticated levels of performance that instruction is needed. (Herber, 1964, p. 275)

Sanders (1969) discusses the contribution of study guides to social studies learning in a class of poor readers. He found the guides especially helpful to students with reading problems. These studies seem to indicate that study guides can be helpful to both advanced readers and students with reading problems.

Experts in reading have identified many purposes for study guides. Some uses of the study guides were summarized in a report by Vine (1967). According to this author there are four major purposes: First, they provide guided practice on skills needed to acquire information while, simultaneously, providing guidance in the development of concepts; secondly, they provide for a range of ability and achievement levels to meet individual differences; third, they help develop thinking abilities; and finally, they guide students to independence in applying reading-thinking skills and forming concepts. Another

purpose not mentioned by Vine is that study guides help teachers provide directed, organized, and integrated instruction relating reading to subject matter materials.

Earle (1969) surveyed the task of the construction and use of study guides. According to Earle one must first analyze the assignment for content. The teacher must decide what information to emphasize. Earle lists four questions that should be considered in this analysis: (1) Is it significant to the discipline? (2) Is it interesting to the student? (3) Is it broadly applicable outside the discipline? (4) Does it have potential for attacking problems and issues of the present and future? (Earle, 1969) Another question not mentioned by Earle but useful in constructing study guides is: What information should be excluded from the guide? (i.e., what information in a lesson is relatively useless, out of date information, or not pertinent to the topic of the guide).

The second task to be accomplished in preparing a study guide is to analyze the assignment for process. To make this analysis a teacher must identify how the material is organized, determine what reading-thinking skills are necessary to understand the material, and answer the question of what people do with the information.

To analyze an assignment for process a teacher could also describe the information in terms of patterns of organization. Niles (1964) identified four organizational patterns which occur often: simple listing of details under a main topic, cause and effect (relating specific causes to specific effects), comparison and contrast, and sequence or time order.

After the content and process of an assignment have been identified, the teacher needs to consider the content and process in relation to the students' abilities and achievement levels.

The study guide should provide differing amounts of assistance depending upon the competency of the students and the difficulty of the material. Some students would work only on Level I comprehension questions. Others would work on Level II interpretation or Level III application, depending upon their need for assistance and their ability to understand the material. This differentiation of questioning according to reading abilities of the students can lead to a more successful learning experience.

Structured overview. A tool for teaching reading in the content area which attempts to prepare students for new learning is the structured overview. Estes and his colleagues (1969) described it as a visual and verbal presentation of the key vocabulary of a learning task. The basic purposes of the structured overview are to: clarify the teacher's instructional objectives, and provide students with an idea framework within which they can meaningfully organize information.

Earle (1969) presented the following set of directions for construction of a structured overview: (1) select every word that you intend to use that you feel is necessary to the students' understanding of the materials to be presented; (2) take the list of words and arrange, rearrange, and add to them until you have a diagram which shows the relationships that exist among the ideas; (3) display the diagram and explain to the students why you arranged the words as you did. Estes (1969) studied the use of the structured overview and two other methods of introducing a reading selection to high school students. The three methods considered were the use of advanced organizers, the use of the structured overview, and the use of purpose questions. This researcher concluded that (1) under certain

retention to a greater extent than advanced organizers or purpose questions, and (2) under other circumstances the structured overview appeared to facilitate learning and retention in a manner similar to the advanced organizer.

Skills teaching. The purpose of vocabulary skills teaching is to increase the students' abilities to derive meaning independently from unknown or little known words. Skills teaching consists of direct instruction in the analysis, pronunciation, and determination of meanings of key words or terms. Many of the terms designated by use in the structured overview would be used in skills teaching. The necessary word analysis skill, whether it is contextual analysis, structural analysis, dictionary usage or any of the other skills, is used to teach the students new vocabulary. For example, as teachers refer to the structure of words, students' background knowledge about structure which they can apply independently when confronting unfamiliar terms.

Vocabulary extension exercises. Many studies indicate the value of emphasizing the teaching of vocabulary in content areas (Hasselris, 1968; Fowler, 1965; DeBoer and Whipple, 1961). Vocabulary extension exercises provide guided opportunities for the student to increase his grasp of word meanings, and explore and verify relationships. Some types of vocabulary extension exercises include matching, word puzzles, exercises, categorizing exercises, building words, unscrambling words, and word associations exercises. The possible types of vocabulary extension exercises are unlimited. (See Herber, 1969).

Cloze test. An accurate evaluation of students' competencies for the reading task is important in establishing realistic possibilities for the individual student as well as the entire class. The cloze procedure was developed by Taylor (1953) and is based upon the psychological theory of closure. This theory states that a person wants to complete any language pattern which is not complete. In the case of the cloze test, the language pattern is a passage from which every nth word was omitted.

The great ease and speed with which cloze tests can be constructed make them ideally suited as measures of a student's ability to read and comprehend the material. The cloze test is constructed by selecting approximately 260 running words from the text of a specific subject matter field. The first sentence is printed in its entirety. Next, one of the following five words is deleted. This deletion of every fifth word is continued until fifty blanks are made. The last sentence is followed with a complete, unutilized sentence. The student is required to fill in the blanks with words that make sense. This test is easy to score and interpret and is a valid measure of a student's ability to comprehend the text. (Bormuth, 1967)

This brief description of the instructional tools is provided merely to present the reader with some information about the instructional tools and strategies discussed in the workshop. Neither the research reported on the tools, nor the description of the tools is meant to be comprehensive.

Inservice Program

The inservice program which produced the instructional tools of this study was held at Montevideo High School in the Rockingham County School System in Virginia. Five high school teachers and one junior high teacher participated in the two-phase program.

The participants were all volunteers and received college credit for the first phase of the program and could select college credit or financial reimbursement for the second phase. The instructor for both phases was a college reading teacher.

The first phase of the workshop was conducted during a sixteen-week period from January-May, 1975. This phase of the workshop was designed to inform the participants of basic strategies necessary to integrate the teaching of reading into the secondary school curriculum. No specific teaching skills have been identified as valid or appropriate for the training of teachers to integrate reading in the secondary curriculum. However, Herber and Sanders (1969) have identified a series of teaching skills which lead to higher levels of student access in subject matter classrooms. The work by these researchers is suggestive of some of the specific skills secondary teachers can use for integrating the teaching of reading with subject matter content. These skills can be taught in inservice workshops. Since the work by Herber and Sanders was exploratory and since it has been suggested by Otto and Erickson (1973) that the specific needs of a teaching group be identified by assessment procedures, the skills for this workshop included a wide range of techniques considered appropriate to successfully teaching reading in secondary school classrooms. The following set of objectives were those presented to the inservice participants:

- (1) locating and using professional information,
- (2) recognizing and teaching word perception skills,
- (3) specifying instructional objectives,
- (4) locating, and using appropriate instructional materials,
- (5) using appropriate classroom organizational techniques,
- (6) recognizing sound components of secondary reading programs,
- (7) stating reasons for the necessity for teaching reading in subject matter classrooms,
- (8) relating reading and language

to subject matter materials: a definition, (9) assessing student reading competencies, (10) constructing and using study guides, (11) organizing and using a pertinent lesson framework, (12) using individual and small group reading assignments, (13) recognizing and teaching vocabulary skills, (14) using affective goals in the reading and content classrooms, (15) recognizing and teaching comprehension skills, (16) identifying reading versatility as a pertinent instructional goal. From this descriptive list of objectives, participants were given an opportunity to master ten to twelve of the most important. Importance in this instance was determined by the participants in light of their own teaching strengths, weaknesses, and/or preferences. These instructional objectives and the accompanying materials were used to guide the participants through a series of learning activities. While it is not possible to describe each instructional activity in detail, it is possible to describe the components used in every instructional unit. Each instructional unit contained the following set of instructional objectives: formative tests; a variety of learning activities, i.e., readings, lecture, discussion, demonstration, cassette tapes, and films; a series of mastery or performance activities; and student evaluation of all aspects of the instructional unit.

During the first phase of the workshop the participants were introduced to the basic objectives and related descriptive materials. In addition to the instructional units, other teaching strategies were used to introduce the students to the basic concepts contained in the instructional units. They included lecture, demonstration, group discussion, role playing, independent reading and study, individual conferences with the instructor and guided practice. A heavy emphasis in this portion of the workshop was placed upon the instructor demonstrating in his presentations the

techniques the participants were to use and evaluate in their classrooms. This in fact was one of the basic requirements for all participants in the workshop. They had to field test the basic teaching tools discussed and demonstrated in the workshop in their classrooms.

In an effort to ensure maximum application of the basic skills acquired in phase one of the workshop, a second phase was conducted. The second phase of the workshop was designed to provide the participants time and guidance for constructing the educational tools to which they were introduced in the first series.

To some extent this is in response to Heilman's (1966) observation that teachers are not able to assimilate all of a group of techniques and ideas to which they are exposed when many concepts are introduced. From our point of view it does not seem reasonable to expect application of new ideas and concepts without further practical, guided effort on the part of the teacher and the workshop instructor.

This second phase of the workshop was held during a three-week period in June, 1975. As stated earlier, there were six participants, five who taught at the high school and one at the junior high level. The junior high school teacher taught remedial reading. Three of the five at the high school level were English teachers, while one taught French and one was a distributive education teacher. All had participated in the first phase of the workshop. However, some had not mastered all the necessary techniques for designing the teaching tools which would be developed in phase II. At the beginning of this phase therefore, the participants reviewed their proficiency in the use of skills needed for integrating reading instruction with subject matter. The participants

rated themselves on their ability to prepare appropriate instructional tools. Even though this activity of evaluating participants' knowledge is generally related to Aaron's (1965) idea of involving participants in establishing the goals of an inservice workshop, it is more directive and precise since it provides the participants with an opportunity to assess their own knowledge related to specific substantive areas before determining their goals or objectives. Table I shows the results of the teachers' evaluation of their proficiency to perform the specific tasks taught in Phase I of the two part workshop.

TABLE I
 SKILLS AND COMPETENCIES ACQUIRED
 IN PHASE I OF THE WORKSHOP
 (Frequencies)

Skills and Competencies	Can-Do f	Can't Do f.	Not Sure f	Total f.
Construct a cloze test	4	1	1	6
Construct a group reading inventory	3	2	1	6
Use a readability formula	2	2	2	6
Use a standardized reading test	2	1	3	6
Perform a content analysis	4	2	0	6
Perform a process analysis	4	2	0	6
Construct a study guide	5	1	0	6
Develop a structured overview	4	2	0	6
Plan and prepare vocabulary extension exercises	4	1	1	6

Most participants reported that they had acquired some skill in the use of diagnostic instruments, i.e., cloze test and group reading inventory. Participants indicated a lack of confidence with pre-designed instruments, such as readability formulas and

standardized reading tests. This may be explained by the fact that the objectives of the workshop were focused more on the design and construction of instructional tools and not the use of pre-designed instruments. Nearly all participants indicated that Phase I had provided them with competencies needed to construct study guides and related tools which was, in fact, one of the major objectives of Phase I of the workshop. The information gained from this self-evaluation checklist was used to assign independent work on instructional units and guided work with the instructor to gain needed competencies.

The jointly determined group goals of the second phase of the workshop included: (1) the development of instructional tools that allow the teacher to differentiate reading assignments according to students' abilities; (2) the development of tools to determine students' competencies to read the textual material; (3) the development of skills of performing content analysis of textual material; (4) and the development of skills in performing process analysis on textual material.

The workshop was individualized in that each participant set individual priorities for the development of special tools by ranking them on a "1" (most important) to "5" (least important) scale. The priorities in terms of workshop activities were the instructional tools they developed during Phase II of the workshop. Table II reflects the ranking of the participants' choices.

TABLE II
RANKED PRIORITIES OF PARTICIPANTS
FOR THE WORKSHOP

Final Ranking	Rank Score
Construct study guides for use with the text you use in class	6
Prepare vocabulary extension exercises	17
Develop structured overviews	19
Construct group reading inventory for study skill assessment	26
Construct cloze tests for student assessment and placement	26

The final ranking for the five activities was determined by taking the ranking indices (1-5) item in the priority list and multiplying the ranking by the number of participants who selected that ranking. For example, "Construct study guides" was ranked 1 by 6 individuals. The rank score for that item then was 6 ($1 \times 6 = 6$). Therefore, in the table the smaller rank score items were rated as higher priority by more individuals.

As the table indicates, all participants reported the construction of study guides as being most important. The participants rated the construction of other instructional tools, i.e., structured overviews and vocabulary extension exercises as moderately important. Of least importance to the participants as an objective for the workshop was the construction of diagnostic tools, i.e., cloze test and group reading inventory.

Individual conferences with the instructor and participants were held throughout the workshop. The first such individual conferences were held with each of the participants to set

individual goals for the workshop. The results of the two survey tools were used as a basis for discussion and decision making for each of the participants.

The actual tasks of the workshop were accomplished through both individual and group work. The participants designed instructional tools for use in their subject matter areas. The group shared ideas through discussion and through some preliminary evaluation of the instructional tools they prepared. Both individual and group work was guided by the instructor. Lectures were given as a review of basic concepts. They were also used to introduce new material to the participants. Brief evaluative comments by the instructor also served as a springboard for improvements in the design of the instructional tools. Also the instructor used the instructional techniques, in his own teaching that were recommended for use by the participants whenever possible. This provided excellent examples for the workshop group in "how to" design and use the instructional tools. The participants were given practice using strategies for integrating reading in the curriculum by working together on textual material to analyze it for content and process.

At the conclusion of the workshop each participant was asked to evaluate the effectiveness of the workshop program. A series of evaluation questions were provided by the workshop instructor to guide participants in their evaluation of workshop activities. However, the participants also had an opportunity to evaluate any aspects of the workshop in an open ended manner.

The Evaluation of the Workshop

In order to evaluate the effectiveness of both Phase I and II of the workshop four evaluative activities were prepared and implemented. To determine the impact on teacher attitude toward integrating reading into their subject matter material, an attitude scale was administered before the workshop and after the workshop. Secondly, the participants designed evaluation forms to measure the teacher's reactions to the study guides and other instructional tools after they used them in the classroom. Also the workshop participants prepared evaluation forms to assess student reactions to the study guides after they had used them in the classroom. Finally, the teachers were asked to respond in writing to a series of questions related to the workshop. At the same time they were invited to make comments related to any aspect of the workshop in an open-ended manner.

The questions the participants were asked to respond in writing to were as follows:

1. Was Phase II of the workshop helpful?
2. Were you able to develop relevant instructional tools for classroom use?
3. In terms of your individual goals were you able to meet the priorities you set at the beginning of the workshop?
4. As you gained insights during the course of the workshop did any of your priorities change? Did you add any to your list?
5. Was there ample opportunity to review the skills and competencies you acquired during Phase I of the workshop?

The attitude inventory used to measure changes in teacher attitudes toward integrating reading in the secondary curriculum was administered in the beginning and at the end of the inservice training. The most favorable possible response was a score of 70 and the most unfavorable possible response was a score of 14. The average

score for the workshop participants was 45. This is, for all practical purposes, a neutral response and suggests that at the beginning of the workshop participants were neither opposed to or supportive of the integration of reading into the secondary curriculum. Certainly, it indicates no strongly held position of the importance of their role as one which involved development and utilization of reading strategies.

When the participants were surveyed at the conclusion of the workshop, the average score was 56. This was a shift in attitude change and represents a more positive understanding of the relationship between the use reading skills and students' capacity to grasp the textual material of content areas. More specifically, the procedures in assessing the participants attitude was as follows. A fourteen-item attitude inventory (see Appendix I) which makes use of the Likert method of summated rating was used to measure change in teacher attitudes toward integrating reading in the secondary curriculum. The instrument was designed by Otto "to measure the direction and intensity of teachers' attitudes toward teaching of reading in the content areas of the secondary curriculum." (Otto, 1969, p. 49) The attitude inventory was administered to all participants in the workshop on the first day of the inservice training and again at the conclusion of the training.

The attitude inventory makes use of the Likert scaling technique which assigns a scale value to each of the responses. Weights of 5, 4, 3, 2, 1 were assigned a priori to the response choices for the positive items (items 2,3,4,9,11,13, and 14) and weights of 1,2,3,4, and 5 were assigned to the same choices for the negative items (items 1,5,6,7,8,10, and 12.) In this inventory for measuring changes in teacher attitudes toward integrating reading in content areas, there are seven positive and seven negative items. The following values from the attitude scale are revealing:

14 X 5 = 70 (most favorable response)

14 X 3 = 42 (= neutral response)

14 X 1 = 14 (Most unfavorable attitude)

The scores for any individual will fall between 70 and 14, above 42 if attitudes tend to be favorable and below 42 if attitudes tend to be unfavorable.

As mentioned previously, there was a shift from a pre-workshop score of 45 to a post workshop score of 56. The shift is in the positive direction and indicates that the participants at least recognize the importance of integrating the teaching reading along with subject matter.

A eight-item questionnaire (Appendix II) was used to obtain student evaluations of the teacher-developed study guides. The questionnaire was constructed by the participants in the inservice workshop. The questionnaire was administered at the completion of each unit for which study guides were used. The student responses were anonymous.

The student evaluation questionnaire is both closed and open form. Respondents were asked to evaluate the study guides by responding either "yes" or "no" to six evaluative statements concerning the study guides. In addition, students were encouraged to provide suggestions for improving the study guides. These unrestricted comments further pinpointed strengths and weaknesses in the guides.

The students' evaluation of the teacher-developed study guides were extremely positive regarding the helpfulness of the guides and, in general, the skill of the teachers in developing the guides. Table I depicts the students' responses to questions about the study guides. Approximately 150 guides were evaluated although the number varies from question to question since students did not always respond to every question.

TABLE I
STUDENT EVALUATIONS OF STUDY GUIDES (PERCENTAGES)

Items.	Yes	No
1. All questions were clearly stated.	88.1	11.9
2. All words in the questions were familiar to me.	81.8	18.2
3. I found it easy to find answers to the questions in the text.	91.0	9
4. The vocabulary exercises helped me understand the reading material.	92.4	7.6
5. The level of difficulty of the questions was realistic.	90.1	9.9
6. Did the study guide help you understand the assignment.	94.5	5.5

The construction techniques of the study guides are reflective of a diagnostic attitude toward teaching-learning developed in the workshop. For example, questions (2) "All words in the questions were familiar to me.", and (5) "The level of difficulty of the questions was realistic." evaluate the teachers' ability to diagnose the competencies of their students and use this diagnosis in developing study guides which are appropriate for their students.

The students' evaluation of the study guides indicate that most of the teachers diagnosed their students competencies accurately and they reflected this diagnosis in the construction of study guides. 81.8% of the students indicated that the teachers used words in the questions that were understood by them. This suggests that the teachers were able to accurately identify the reading levels of their students and use this knowledge in constructing the guides.

A larger percentage (90.1) of the students indicated that the level of difficulty of the questions was realistic. A typical comment about the difficulty of the study guide was: "It was just right. I could not find the answers in a big hurry". Obviously, the students felt the study guides were designed at appropriate levels of difficulty.

It is instructive to recognize the negative percentages for questions (1) and (2). While low they seem to suggest that teachers were not always careful to select words within the vocabularies of their students and state the questions clearly. Most of the students who responded "no" to question (1) indicated in their written comments that they did not understand the questions because the words used were too difficult. Typical comments included: "I don't get all the words," and "it had some hard words in it."

Question (2) reflects the same problem and shows the need for being extremely careful in the selection of words for questions.

It should be noted that interpretation of these "no" percentages is complicated by the fact that some of the study guides were designed for a French class. In fact, one French student indicated that he should have been familiar with the words when he stated: "I had to look up a few words but I should have known them." Many students who responded positively to questions (1) and (2) made comments similar to the student who observed: "I liked the questions-they made me think".

Items (4) and (6) indicate almost total consensus among students as to the value of study guides in enabling them to better understand the content area material. 92.4% of the students felt that the vocabulary exercises helped them to understand the reading material. Some typical comments about the use of vocabulary exercises were: "They definitely helped!"; "It made the story easier to understand. I wish you would do it all the time."; "Yes, it helped a lot!"; "I could read without looking the words up."; and, "It made it more interesting."

Nearly 95% of the students indicated that the study guides helped them understand the assignment. The positive responses of students were reflected in such observations as: "I think the study guides helped make things clearer"; "It made you think about what you read"; and, "I like them. They help you with important things." Certainly the very positive evaluation reflected in all items but especially in items (4) and (6) indicate that the students' believe that guides are extremely helpful in understanding content area reading material.

Herber (1970) has identified one of the major outcomes of integrating reading with content as enabling students to become "independent learners". Throughout the students' comments about study guides references were made to the fact that the study guides made the students think. The comment of one student clearly shows the value of study guides in directing students to use knowledge

independently. The student observed: "you get more out of things that you find out by yourself than when the teacher tells you what it is." Another student indicated that he enjoyed being encouraged to think for himself. He commented: "I think the study guides are good because we had to think more about the story and ourselves."

In evaluating the study guides there was marked agreement between student and teacher evaluations. Table II reports the rank ordering of the teachers' evaluations of twenty three different study guides.

The teachers' form for evaluating study guides (See Appendix III) was designed by the workshop participants. It is a closed form opinionnaire which elicits responses to fourteen questions. Respondents check "1" (strongly agree), "2" (agree), "3" (uncertain), "4" (disagree), or "5" (strongly disagree). The questions were devised to evaluate how adequately each study guide covered the basic objectives of the guide as well as whether or not it possessed the salient features of a well constructed guide. The teachers responded to this questionnaire after each study guide had been developed and used. The teachers' form for evaluating study guides was tallied and given a rank score. The final rank score was determined by taking the ranking index (1-5) item and multiplying the ranking by the number of participants who selected the ranking. For example, if 6 teachers check item 1 (strongly agree) for a given question, the rank score for that question will be 6 ($1 \times 6 = 6$). Each question received a separate rank score. The questions were placed in rank order according to their rank score.

In Table II, the reader will find in the extreme left hand column a final ranking for the items. The rank of (1) indicates the highest agreement among the teachers while the

rank of (14) indicates the lowest agreement. The number in parenthesis indicates the number of teachers that selected that ranking for a particular item. For example, item one shows 13 beside rank one (strongly agree), 8 (agree) beside rank two and (2) beside rank three (uncertain). This indicates that the teachers' "strongly agree" that 13 of the study guides encouraged active involvement of the students while 8 "agreed" and 2 were "uncertain."

TABLE II
TEACHER'S EVALUATION
OF STUDY GUIDES

Final Ranking	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
1. The study guide encouraged active involvement of the students.	1(13)	2(8)	3(2)	4	5
2. Study guides enabled the students to be more independently successful readers than they would have been without study guides.	1(13)	2(10)	3	4	5
3. The study guide encouraged positive attitudes in the students.	1(12)	2(11)	3	4	5
4. The content analysis uncovered the most essential material.	1(10)	2(12)	3(1)	4	5
5.5 The directions were complete and clear.	1(7)	2(16)	3	4	5
5.5 The words used in the questions were at a level comprehensible to students.	1(7)	2(16)	3	4	5
7. The vocabulary extension exercises were designed so that the students could gain an understanding of the words without over-use of a dictionary.	1(10)	2(10)	3(2)	4(1)	5
8. The process analysis helped identify the reading, listening, and discussion activities necessary to acquire the information.	1(8)	2(12)	3(3)	4	5
9. There was a sufficient number of questions.	1(7)	2(12)	3(4)	4	5
10. The content analysis enabled me to identify the most important subject matter to teach.	1(6)	2(12)	3(5)	4	5
11. The levels of questions were properly differentiated.	1(6)	2(12)	3(5)	4	5
12. The study guide identified the words the students did not know.	1(9)	2(7)	3(5)	4(2)	5
13. There was sufficient variety in the way the study guides were developed.	1(3)	2(13)	3(6)	4(1)	5
14. Assignments reflected different learning styles.	1(1)	2(8)	3(13)	4(1)	5

in the construction of study guides. Most of the teachers state that their guides reflected accurate content analysis. However, some teachers indicated uncertainty about their proficiency in performing content analysis on some material. This may suggest a lack of experience in identifying essential material a shortcoming which could be overcome with continued use and construction of guides.

Item 5.5, "the words in the questions were at a level comprehensible to the students," reveals some disparity when compared with item (2) of the students evaluation, "all words in the questions were familiar to me." The teachers all agreed that the words used in the guides could be understood by their students. However, nearly 20% of the students stated that some of the words were not familiar to them. This suggests that in preparation of guides teachers must be careful to select words their students know and understand. Also, teachers should use student evaluations to improve the particular guides in which vocabulary problems have been identified.

The teachers recognized the importance of performing process analysis, i.e., identification of the reading and thinking skills necessary to read and understand the material, in constructing study guides. Item eight depicts their agreement with regard to the importance of process analysis in identifying the reading, listening, and discussion activities necessary to acquire the information.

The teachers expressed least consensus regarding items (13) and (14) which evaluate the guides ability to meet the needs of students varying learning styles.

In addition to the structured teacher's evaluation form, participants were asked to write a narrative evaluation of the in-service workshop. These evaluations were without exception extremely positive about the value of the workshop. Participants were asked to respond to specific questions related to the workshop.

In answering these questions, which were enumerated above, all the teachers stated that Phase II of the workshop was extremely helpful and was the logical follow-up to Phase I of the workshop.

In evaluating their development of instructional tools for use in their classrooms the participants expressed satisfaction with their work. One teacher constructed cloze tests, structured overviews, informal reading inventories, and study guides for all nineteen chapters of his textbook. Others, who were not this productive, did feel they accomplished a great deal and that they were prepared to continue the development of instructional materials on their own. As one teacher stated:

I can now devise materials with ease and confidence, on my own, to meet specific needs of students.

The participants were asked to evaluate, in terms of their own individual goals, whether or not they meet the priorities they set at the beginning of the workshop. Some felt that they had met all their priorities while others stated that time limited their accomplishments. As one teacher observed:

I have developed several of each of the major instructional tools to be used in my own instructional area. My only regret is that I was unable to work up these reading skills tools for all of my courses. Time limited me to two course preparations.

Another participant evaluated his work in this way:

I established priorities along the lines of cloze tests, group reading inventories, structured overviews and study guides. For one course, Mass Media, I met all priorities and feel ready to give additional help in reading assignments in this class. I also prepared a cloze test and several study guides for material in a second English course; although, I did not complete all steps involved in outlining this class, I feel that I have made a valuable beginning both with it and with applying a similar method to other courses.

The participants were asked if they changed any of their individual priorities as they gained insights during the course of the workshop. Some of the teachers thought that they set

their priorities accurately in the beginning of Phase II of the workshop. Others added priorities to their original goals. One teacher expanded his goals and planned to establish a library in his classroom. He commented:

I have gained a new awareness of the importance of reading in all areas of education. I am in the process of setting up a corner library for students in my room.

All of the workshop participants in Phase II thought that there was ample time to review the skills and competencies they acquired during Phase I of the workshop. Many of the teachers stated that the practice in actually designing the instructional tools they learned about in Phase I enabled them to better understand what they had learned. One participant observed:

Through actually designing teaching tools to deal with specific reading needs of students I was able to fully understand the value and application of the techniques I learned in Phase I.

The teachers identified the development of instructional tools for integrating reading in their content area as one of the most important outcomes of the inservice training. As one teacher stated:

This workshop enabled me to review the basic instructional tools we learned in the reading course. But most important of all, we were given valuable individual help in developing these tools for use in our own classroom.

Another participant observed that the workshop provided confidence with regard to the quality of the instructional tools developed in the training.

Although I consider myself a very conscientious teacher, I am certain I would never have accomplished on my own as much as I was able to do in this workshop. Even if I had worked out a few guides, I would not have the confidence in their effectiveness that I now have.

In summarizing the value of the workshop one participant expressed the attitude of the teachers toward the inservice training:

Over-all, I feel that this workshop has provided me with the most valuable practical help I have ever gained from an "education" course.

BIBLIOGRAPHY

- Adams, M.L. "Teachers' Instructional Needs in Teaching Reading," Reading Teacher, 17, (January, 1964).
- Austin, M. C. and C. Morrison. The First R: The Harvard Report on Reading in Elementary Schools. New York: MacMillan Co., 1973.
- Bader, Lois A. "Certification Requirements in Reading: A Trend." Journal of Reading, December, 1975.
- Bornuth, J. R. "Comparable Cloze and Multiple-Choice Comprehension Test Scores." Journal of Reading, 10 (1967), 291-299.
- _____ "Cloze Test Readability: Criterion Reference Scores." Journal of Educational Measurement, 5, (1968), 189-196.
- Deboer, John J. and Gertrude Whipple, "Reading Development in Other Curriculum Areas," Development in and Through Reading. Chicago: University of Chicago Press, 1961.
- Durrell, D. D. Improving Reading Instruction. New York: Harcourt, Brace, and World, 1956.
- Earle, Richard A. "Developing and Using Study Guides" in Harold L. Herber and Peter L. Sanders, editors, Research in Reading in the Content Area. Syracuse: Reading and Language Arts Center, 1969.
- Estes, Thomas H., Daniel C. Mills, Richard F. Barron. "Three Methods of Introducing Students to a Reading-Learning Task in Two Content Subjects" in Harold L. Herber and Peter L. Sanders, Editors, Research in the Content Area. Syracuse: Reading and Language Arts Center, 1969.
- Estes, T.H. and D. Piercy. "Secondary Reading Requirements: Report on the States." Journal of Reading, October, 1973.
- Fowler, Mary Elizabeth. Teaching Language, Composition and Literature. New York: McGraw-Hill Book Company, 1965.
- Greslin, Robert H. and Patricia W. York, "Literacy Skills as a Barrier to Inservice Training," Journal of Reading Behavior, Summary, 1970-1971.
- Goodacre, Elizabeth J. and Margaret M. Clark. "Initial Approaches to Teaching Reading in Scottish and English Schools," Reading, June, 1971.
- Harris, Albert J. "The Preparation of Classroom Teachers to Teach," Reading. Journal of Research and Development in Education, Fall, 1973.
- Hasselris, Peter. Effects on Reading Skill and Social Studies Achievement from Three Modes of Presentation: Simultaneous Reading-Listening, and Reading. Unpublished Doctoral Dissertation, Syracuse University, 1968.
- Heilman, W. A. "Effects of an Intensive Inservice Reading Program On Teacher Classroom Behavior and Pupil Reading Achievement," Reading Teacher, 19 (May, 1966).

Bibliography (continued)

- Herber, Harold L. A Report on Content Association in PSSC Physics, Project English Demonstration Center, Syracuse University, January, 1964. (Mimeographed).
- Herber, Harold L., Teaching Reading in Content Areas. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1970.
- Herber, Harold L. and Peter L. Sanders, Research in Reading in the Content Area: First Year Report. Syracuse: Reading and Language Arts Center, 1969.
- Moburg, Lawrence G. Inservice Teacher Training in Reading. Newark, Delaware: The International Reading Association, 1972.
- Niles, Olive S. "Improvement of Basic Comprehension Ability: An Attainable Goal in Secondary Education." (Monograph on Secondary Education #6381) New York: Scott, Foresman, 1964.
- "Developing Essential Reading Skills in the English Program," in Reading and Inquiry. Newark, Delaware: International Reading Association, 1965.
- Otto, Wayne. "Junior and Senior High School Teachers' Attitudes Toward Reading in the Content Areas." in George B. Schick and Merrill M. May, Editors. The Psychology of Reading Behavior. Milwaukee, The National Reading Conference, Inc., 1969.
- Otto, Wayne and Lawrence Erickson. Inservice Education to Improve Reading Instruction. Newark, Delaware: International Reading Association, 1973.
- Rankin, Earl F. and Joseph W. Culhane. "Comparable Cloze and Multiple-Choice Comprehension Test Scores," Journal of Reading, 13, (December, 1969), 193-198.
- Roeder, Harold H., Dallas K. Beal and William Eller, "What Johnny Knows that Teacher Educators Don't," Journal of Research and Development in Education, Fall, 1973.
- Sanders, P. L. "Reading in the Content Areas: Report of a Social Studies Program," Journal of Reading, 12 (1969), 283-286, 337.
- Smith, R. J. and W. Otto. "Changing Teacher Attitudes Toward Teaching Reading in the Content Areas," Journal of Reading, 12 (January, 1969).
- Smith, R. J., W. Otto, and K. Harty. "Elementary Teachers' Preferences for Pre-Service and In-Service Training in the Teaching of Reading," Journal of Educational Research, 63 (July-August, 1970).
- Taylor, Wilson L. "Cloze Procedure: A New Tool for Measuring Readability," Journalism Quarterly, 30, (Fall, 1953).
- Vine, Harold A. "Guiding Reading Achievement," in Harold A. Vine, et. al., Editors. Teaching Reading in Secondary Schools. Syracuse University, The Reading and Language Arts Center, 1967.

**APPENDIX I
ATTITUDE INVENTORY**

	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
1. In the secondary school the teaching of reading should be the responsibility of reading teachers only.	1	2	3	4	5
2. Secondary school teachers can teach reading effectively without special university courses in methods of teaching reading.	1	2	3	4	5
3. The teaching of reading skills can be incorporated into content area courses without interfering with the major objectives of those courses.	1	2	3	4	5
4. Any secondary school teacher who assigns reading should teach his or her students how to read what is assigned.	1	2	3	4	5
5. With rare exceptions, students should know what there is to know about reading before they are permitted to leave the elementary school.	1	2	3	4	5
6. Only remedial reading should be necessary in the secondary school and that should be done by remedial reading teachers in special classes.	1	2	3	4	5
7. Teaching reading is a technical process that secondary school teachers generally know nothing about.	1	2	3	4	5
8. Secondary school teachers cannot teach reading without special material designed for that purpose.	1	2	3	4	5
9. Teaching reading is a necessary and legitimate part of teaching any content course in the secondary school.	1	2	3	4	5
10. Teaching reading takes all the fun out of teaching at the secondary school level.	1	2	3	4	5
11. Every secondary school teacher should be a teacher of reading.	1	2	3	4	5
12. At the secondary school level students want to learn content, not how to read.	1	2	3	4	5
13. Integrating the teaching of reading with the teaching of specific content can be as exciting for the content area teacher as teaching content only.	1	2	3	4	5
14. Content area teachers in the secondary school are probably more competent to teach the reading skills needed for their subjects than special reading teachers.	1	2	3	4	5

APPENDIX II

Form for Student Evaluation of the Study Guides

DIRECTIONS:: Read the statements carefully and check either "yes" or "no". For each "no" please suggest improvements needed. You need not sign your name. Thank you for your evaluation. It will be of help in improving the study guide for future use.

Yes

No

1. All questions were clearly stated.

Comment: _____

2. All words in the questions were familiar to me.

Comment: _____

3. I found it easy to find the answers to the questions in the text.

Comment: _____

4. The vocabulary exercises helped me understand the reading material.

Comment: _____

5. The level of difficulty of the questions was realistic.

Comment: _____

6. Did the study guide help you understand the assignment?

Comment: _____

7. What was the most helpful part of the study guide to you?

8. What do you feel should have been included that was not?

APPENDIX III

Teacher's Form for Evaluating Study Guides

	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
1. The content analysis uncovered the most essential material.	1	2	3	4	5
2. The directions were complete and clear.	1	2	3	4	5
3. The levels of questions were properly differentiated.	1	2	3	4	5
4. The words used in the questions were at a level comprehensible to students.	1	2	3	4	5
5. There was a sufficient number of questions.	1	2	3	4	5
6. The study guide identified the words the students did not know.	1	2	3	4	5
7. The vocabulary extension exercises were designed so that the students could gain an understanding of the words without over-use of a dictionary.	1	2	3	4	5
8. There was sufficient variety in the way the study guides were developed.	1	2	3	4	5
9. Assignments reflected different learning styles.	1	2	3	4	5
10. The study guide encouraged active involvement of the students.	1	2	3	4	5
11. The study guide encouraged positive attitudes in the students.	1	2	3	4	5
12. The process analysis helped identify the reading, listening, and discussion activities necessary to acquire the information.	1	2	3	4	5
13. The content analysis enabled me to identify the most important subject matter to teach.	1	2	3	4	5
14. Study guides enabled the students to be more independently successful readers than they would have been without study guides.	1	2	3	4	5

15. Identify the three (3) strongest features of the study guide:

16. Identify the three (3) weakest features of the study guide:
