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IMPLEMENTING A FRAMEWORK FOR REMEDIAL READING FOR
SEVENTH AND EIGHTH GRADES: A DELPHI STUDY

DISSERTATION

Presented to the Graduate Council of the
North Texas State University in Partial
Fulfillment of the Requirements

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By

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This study determined the instructional approaches and teaching techniques and materials reading specialists perceived to be the most effective for the seventh and eighth grade remedial reading courses mandated by Texas House Bill 246. It also determined the most effective in-service procedures for training teachers assigned to teach these courses.

Fifty-four Texas reading specialists, representing school districts, service centers, and colleges and universities, participated as panelists in the Delphi, completing three rounds of questionnaires. Perceived recommendations were rated by panelists according to levels of effectiveness.

The instructional approach to teaching reading rated as the most effective was a diagnostic/prescriptive approach with individual student plans. The teaching technique rated as the most effective was to provide instruction and practice on a level where students can experience initial success. Materials rated as the most effective were a wide variety of books for both instruction and independent reading. The procedure for in-service training rated as the most effective was to provide follow-up/feedback in the classroom after a training session.

Conclusions drawn from this study include (1) there is no one best approach to teaching postelementary remedial reading; (2) some method should be provided for diagnosing individual student needs from which individual plans can be made; (3) actual reading of a wide variety of materials should be an integral part of the remedial reading program; (4) more attention should be given to comprehension and developing higher level thinking skills than to isolated skill deficiencies; (5) the most effective in-service appears to be based on the self-perceived needs of the teachers; (6) in-service training is more effective if conducted at the building level, scheduled throughout the year or with compensatory time, with follow-up in the classroom provided; and (7) in-service training provided by local reading specialists appears to be the most effective, utilizing the formats of visitations, sharing sessions, and actual demonstrations.

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CHAPTER I

INTRODUCTION

During the seventies, the United States witnessed both a decline in SAT scores and lower student achievement in general (Brodinsky, 1979; Copperman, 1979; Venable, 1981). Public opinion, expressed through the various media (Rubin, 1979; Ornstein, 1982) and substantiated by the Gallup Polls (Gallup, 1981, 1982) voiced more concern over public schools and public education than had ever been expressed before in the history of our country. This public discontent resulted in a nationwide "Back-to-Basics" movement that caused states to re-evaluate their existing educational systems (Rubin, 1979; Ornstein, 1982). Tests of minimal competency were developed and required for graduation from high school and, in some instances, for grade to grade promotion (Farr & Olshavsky, 1980; Ornstein, 1982). Basic curriculum began to be revised.

In Texas, the 67th Legislature directed the revision of the state approach to curriculum through House Bill 246, commonly referred to as the "new curriculum" bill. This new law changed the statutory structure for public school curriculum in that it repealed laws requiring specific courses or subjects and established twelve subject areas that constitute a well-balanced curriculum for each school

district that offers kindergarten through grade twelve. It allows flexibility for those districts with fewer than twelve grades, and encourages local districts to exceed minimum standards (TEA, 1981a, 1981b; Anderson, 1983).

The implementation of House Bill 246 has been, and continues to be, a monumental undertaking. The plan for implementation, approved by the Planning Committee of the State Board of Education, was based on getting input from professional educators in the development of the initial ideas, documents, and recommendations (TEA, 1981a, 1981b; Anderson, 1983). The final recommendations, approved by the State Board of Education, were presented to local school districts by the Texas Education Agency through the Regional Education Service Centers in April, 1983. The State Board has designated "essential elements" of each subject area addressed and will require each local district to provide instruction in those elements at appropriate grade levels (Bergin, 1983; Anderson, 1983).

At the present time, no reading instruction is required past the sixth grade in the state of Texas. Reading courses may be offered as optional electives. Some local districts require developmental reading in the seventh grade, and some offer both developmental and remedial courses at junior and senior high levels. If reading classes are designated as "remedial," they must be taught by certified reading teachers. If they are designated in

other ways, such as "Reading Improvement" or "Basic Reading," they may be taught by teachers with elementary certification (7th and 8th grades only), or by secondary certified teachers with an English major or minor. As a result of this distinction, and because certified elementary and secondary English teachers are more plentiful than certified reading teachers, many reading courses in the state of Texas are taught by teachers not trained specifically in reading. Many of these teachers have never had one course in the instruction of reading. Furthermore, in many instances, the curriculum for these courses was not developed by educators with a knowledge of the process of reading or of approaches for effective reading instruction.

Under the new guidelines, reading will be required at the seventh and eighth grade for those students reading below grade level, as determined by local standards. "Essential elements" of these reading courses will be delineated by the State Board of Education, with descriptors for each of the identified elements (TEA, 1982b). Preliminary outlines of the essential elements and their descriptors were disseminated to school personnel and the public for preview and discussion in the Spring, 1983. These so-called descriptors are actually skills or objectives which will be required at each grade level (see Appendix A). According to Victoria Bergin (1983), Associate Commissioner for General Education in the State of

Texas, House Bill 246 is unique in that it will mandate the objectives that will be taught. Bergin related that no other state has such specific guidelines which have been legislated.

Public hearings concerning the new curriculum were held by officials of the Texas Education Agency in July and August, 1983 (Bentley, 1983b). Held across the state at the twenty Regional Education Service Centers, input was accepted from the public, both lay and professional. House Bill 246 curriculum materials, along with the public comments were presented to the State Board of Education in October, 1983. The State Board is expected to adopt the new curriculum in March, 1984. Targeted date for implementation of this mandate is September, 1984. Ironically, even though the description of the students who will be required to take the courses is remedial in nature, the new regulation will probably not require the courses to be labeled "remedial," thus proliferating existing inadequate programs and instruction.

In order for these new guidelines to be effective in meeting the needs of junior high remedial readers, local school districts will have to develop programs which, while encompassing the essential elements and targeting the descriptors as designated by the State Board of Education, will be based on sound principles of reading instruction. Also, districts will have to develop and implement training

programs for the teachers assigned to teach these courses. This will be especially crucial if, as indicated, the courses are not termed remedial, thus open to teachers with diverse or no training in and no knowledge of reading instruction.

Curriculum directors and reading consultants/supervisors will need to be aware of the instructional approaches to teaching reading which would be most effective for junior high remedial readers. They will need to know the teaching techniques and materials which would be the most effective in motivating the students and promoting the desired outcomes. Also, they will need to have an understanding of the most effective methods for training teachers in the use of these approaches, techniques, and materials. The present study attempted to identify these instructional approaches, techniques and materials, and in-service procedures. Recommendations from reading specialists of the instructional approaches, techniques and materials, and in-service procedures which they deem necessary for effective postelementary remedial reading programs could assist local school personnel in planning course frameworks, selecting materials, and developing and implementing teacher in-service, thus increasing the probability of providing exemplary reading instruction.

Significance of the Study

This study focused on the recommendations of reading specialists regarding the instructional approaches, teaching techniques and materials they deemed as the most effective and appropriate for use in a junior high remedial reading program. It also considered their recommendations as to the most effective procedures for teacher in-service.

The most significant aspect of this study was the implication it had for practical application. According to Alvis Bentley (1983a), Director of Special Services for the Texas Education Agency, the study was very timely and feasible and the information derived could assist public school districts in the implementation of the seventh and eighth grade remedial reading courses required by House Bill 246. Around 700 districts have an average daily attendance (ADA) of less than 1000, and do not have local personnel available for curriculum and in-service development and implementation. The majority of the larger districts do have reading consultants/supervisors to plan and direct the development of new courses. However, many of these districts have their secondary reading programs under a "language arts umbrella" and are directed by consultants/supervisors with an English background. They have no training in reading instruction, especially remedial reading.

Data gained from this study could assist these

districts in developing specific curriculum for the remedial courses and in developing and implementing training for the teachers assigned to teach these newly mandated courses. Even in districts that do have trained reading professionals, data derived from a large group of reading experts can assist with curriculum development and help to substantiate their decisions. The study is significant in that it has the potential for assisting with the implementation of the first curriculum that has been mandated by legislation in the nation.

To summarize, the specific benefits of this study are that

1. The study determines the instructional approaches recommended by reading specialists as being the most effective for a junior high remedial reading program;
2. The study determines the degree of consensus of reading specialists regarding the most effective instructional approaches for a junior high remedial reading program;
3. The study determines the teaching techniques and materials recommended by reading specialists as the most effective for a junior high remedial reading program;
4. The study determines the degree of consensus of reading specialists regarding the most effective teaching techniques and materials for a junior high remedial reading program;
5. The study provides the rationale for developing

- specific curriculum and instructional techniques and materials for a junior high remedial reading program;
6. The study determines the procedures recommended by reading specialists to be the most effective for teacher in-service;
 7. The study determines the degree of consensus of reading specialists regarding the most effective procedures for teacher in-service;
 8. The study provides data which may be used to enhance the understandings of and communications between local school district curriculum directors, reading consultants/supervisors, and teachers responsible for the instruction of the new curriculum, whether they have Reading Certification, Elementary Certification, or Secondary English Certification.

Statement of the Problem

The problem of this study was to determine which instructional approaches, teaching techniques and materials reading specialists perceived to be the most effective in a junior high remedial reading program.

A second concern of the investigation was to determine the most effective in-service procedures for training teachers of junior high remedial reading courses.

Specific Purposes of the Study

The specific purposes of the study were to determine the following:

1. the recommendations of reading specialists regarding the instructional approaches they deemed most effective in a junior high remedial reading program,
2. the extent to which these educators recommended the same instructional approach,
3. the recommendations of reading specialists regarding the teaching techniques and materials they deemed most effective and appropriate in a junior high remedial reading program,
4. the extent to which these educators recommended the same techniques and materials,
5. the recommendations of reading specialists regarding the procedures they deemed most effective for teacher in-service, and
6. the extent to which these educators recommended the same in-service procedures.

Research Questions

The following research questions were posed in this study.

1. Which instructional approaches do reading specialists recommend as the most effective in a junior high remedial reading program?

2. What are the most recommended approaches?
3. Which teaching techniques and which materials do reading specialists recommend as effective and appropriate for a junior high remedial reading program?
4. What are the most recommended techniques and materials?
5. What procedures do reading specialists recommend as effective for teacher in-service?
6. What are the most recommended procedures?
7. What are the differences in the recommendations of the three sub-groups: college and university reading professors, service center reading specialists, and school reading specialists?

Definition of Terms

The following terms have specific meaning when referred to in this study.

1. Junior high remedial reading program/course refers to a seventh and eighth grade course mandated by the state of Texas as a result of House Bill 246, which will be implemented in all public school districts in the state of Texas by September, 1984. These courses are based on the essential elements and their descriptors, as determined by the State Board of Education and approved by the Texas Legislature.
2. Instructional approach refers to a method or procedure for teaching reading, for example: an experience

approach, a programmed approach, a basal approach, or a diagnostic-prescriptive approach.

3. Teaching technique refers to a systematic method or strategy used to teach a particular objective or skill of reading.
4. Instructional materials are books, workbooks, commercial programs, audio-visual equipment or teacher-developed materials which purport to instruct in the skills of reading.
5. In-service encompasses the procedures and programs which will assist in training teachers assigned to teach the newly mandated postelementary remedial reading courses.
6. Reading specialists are educators with a minimum of twelve-fifteen hours of advanced training in the process of reading and reading instruction. They may be public school reading specialists, supervisors, coordinators; secondary or all-level certified reading teachers; Regional Education Service Center reading specialists; or university and college professors of reading.

Basic Assumptions

The following assumptions were made for the purposes of this study.

1. The responses received on the questionnaire will be a

reflection of the recommendations held by the majority of reading specialists.

2. The Delphi method is recognized as an accepted method of codifying recommendations and determining degrees of consensus.

Limitations

The results of this study are to be generalized only to local school districts in the state of Texas. The results reflect the codified recommendations and degrees of consensus of the selected sample of reading specialists.

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CHAPTER II

SURVEY OF THE RELATED LITERATURE

As this study is concerned with current research regarding seventh and eighth grade remedial reading programs and teacher training procedures, this survey of information and research findings was restricted primarily to recent studies. The categories reviewed were: (1) the status of remedial reading for postelementary students, (2) methodology, instructional techniques and materials for postelementary remedial reading instruction, and (3) in-service procedures for effective reading instruction. These areas of research have contributed to the development of this study by providing a frame of reference for the data derived from the study.

Status of Remedial Reading Classes for Postelementary Students

According to Early (1973), the status of reading instruction in the secondary school changed very little from the early forties to the early seventies. Throughout this time period, administrators and departments of education encouraged and directed postelementary teachers to incorporate reading instruction in all their content area courses. Many individual reading educators, national crusades such as the Right-to-Read, and organizations like the IRA

(International Reading Association) have intensively promoted content area reading programs for at least three decades (Witte & Otto, 1981). However, investigations (Hill, 1971, 1975; Early, 1973) of instructional practices in teaching reading indicate that such content-centered reading programs have not become a reality.

Hill's (1971) review of twenty-five surveys of secondary reading published between 1942 and 1970 indicated that planned reading instruction at the secondary level usually took place in developmental, corrective, or remedial class or as part of an English class. However, he concluded that the surveys conducted before 1970 were not well designed and did not give an accurate picture of the type and quality of reading instruction being offered. Early (1969) had previously attempted to review studies that describe successful reading programs at the secondary level, but found them to be limited in quantity and quality. Summarizing descriptive articles of secondary reading programs published between 1959 and 1969, she determined that most reading classes were described as "developmental" or "corrective-remedial." According to Early, the terms "remedial" and "corrective" were loosely and interchangeably used in the literature to describe classes for poor readers at the secondary level. In a later study, Early (1973) concluded that reading classes continued to be the major vehicle for teaching reading at the secondary level, but the content and format

of the courses had changed since her 1969 report. More of the courses were elective and tended to cover one specific area, such as study skills.

This past decade has shown an increase in interest concerning the teaching of reading in junior and senior high schools (Hill, 1979; Criscuolo, 1979a, 1980; Greenlaw & Moore, 1982). Hill attributes this interest to federal and state funding, growing teacher awareness, and vocal public concern over functional reading ability. He maintains that the traditional program patterns of remedial, developmental, and corrective instruction continue to dominate secondary curriculum with a variety of other types of reading courses sometimes offered. This belief was substantiated by a recent survey (Greenlaw & Moore, 1982) in which sixty-one junior and senior high schools from twenty-nine states participated. The majority of respondents (77 percent) indicated that reading was taught as a separate class. "Remedial" reading made up 74 percent of these separate reading courses. Almost half of the responding teachers reported that "developmental" reading was offered in their schools and 35 percent offered "accelerated" reading classes. Other types of reading courses were offered but much less frequently. According to Criscuolo (1979a), reading instruction in the secondary school has customarily taken a backseat to the teaching of reading at the elementary school. But he also sees a change, with the focus now

being directed upward to the secondary level, primarily due to the emphasis on proficiency testing, minimum standards for graduation, sagging SATs and apparent inconsistencies in the high school curriculum.

Although these surveys of Early (1969, 1973), Hill (1971, 1975), and Greenlaw and Moore (1982) have shown that remedial reading is offered in many secondary schools, they have not revealed the content, structure, or quality of the courses. According to Hill (1979), even though some reports indicate a growing sophistication in secondary reading programs, there is a considerable variation in program quality from school to school. He further maintains that remedial and/or corrective reading programs at the secondary levels have not been well planned or executed.

Although the research on secondary reading instruction is not half as voluminous as elementary reading instruction (Criscuolo, 1979a), some reports are beginning to appear in the literature regarding specific remedial programs for postelementary students. This indicates that some states and school districts are beginning to respond to the need for improved remedial reading instruction for secondary students. One such program was developed by the city of New York. Called the RITA (Reading Improvement Through Art) Project (Corwin, 1980), it was designed to improve the comprehension of secondary students reading at least two grade levels below normal. Based on the collaborative

efforts of an art teacher and a reading specialist, the program includes a variety of visual arts activities that motivate and stimulate reading. Pretest and posttest scores in the RITA pilot program showed significant gains in reading levels. Corwin suggests that the success of the program might lie in the fact that the program was conducted with a novel approach in the environment of an art studio, rather than the conventional remedial setting.

Another innovative program designed for students grades five through eight who were at least two years below grade level in reading ability was devised by the District of Columbia Public Schools (1979). Language arts activities were prepared and implemented which related to popular television shows. Videotaped materials dealing with science, drama, history, and personal awareness were used to devise scripts and activities, keeping the vocabulary and dialogue of actual television shows. The evaluation showed that students in the program had greater mean gains than they had had in previous years and that their attitudes toward reading changed in a positive way.

A more conventional approach to remedial instruction was taken by Tallahassee, Florida with their Project NAIL (New Adventures in Learning) (Levy, 1983). Originally funded by a Title II grant in 1968, the program to help students learn to read, write, and think was confined to elementary schools. The strategies of Project NAIL were

so successful that the program spread to the middle schools. Basically, the NAIL Program combines traditional group instruction, using basals, with newer diagnostic-prescriptive, individualized techniques. Project NAIL stresses the relationship between language facility and reading competency as the key to student success. Therefore, the language saturated classroom emphasizes oral language, language-experience, and creative writing. Teachers have been trained to diagnose student strengths and weaknesses and to recognize and accomodate differing learning styles. Project NAIL has ceased to be a federal project, but has become an integral part of the district. As a result of the success of Project NAIL in Tallahassee, it was one of the first programs disseminated nationally in 1973 through the National Diffusion Network. Since then, teachers and administrators in twenty-three states have been trained to replicate NAIL in their schools.

Concerned about secondary basic instruction, the Department of Health, Education and Welfare sponsored a project which was conducted by the New Jersey State Department of Education. The results of the study, which surveyed programs for adolescents in the United States, was published in 1978 (White-Stevens). The publication described sixty-four innovative and successful educational projects, and was designed to assist school districts in making meaningful improvements in programs for their

adolescent population. However, only a small percentage of the programs addressed remedial reading instruction.

The first remedial reading program outlined in the study is actually a basic skills reading program (White-Stevens, 1978). Developed in Tucson, Arizona, Project Catch Up-Keep Up is an individualized diagnostic-prescriptive program designed for remedial students, grades two through nine. The program is based on the belief that reading is a highly individualized process with no single best way to acquire reading competencies. Many instructional and organizational methods are used to meet individual student needs. This program was nationally validated and selected for dissemination in a Project Information Package (PIP).

One of the few programs described in the New Jersey survey (White-Stevens, 1978) developed specifically for secondary schools is Higher Horizons 100 (HH 100) from Hartford, Connecticut. This program was designed for economically disadvantaged students in grades seven through ten with one to four years of reading retardation, but within the normal range of intelligence and without serious emotional problems. Higher Horizons 100 integrates remedial language, cultural activity, and an intensive counseling program to disadvantaged students. This program takes place in an alternative school setting, characterized by small classes, individualized instruction, and intensive

counseling. Originally funded by the Connecticut State Act for Disadvantaged Children, in 1974 it was reviewed as an exemplary program by the American Institute of Research and was one of five selected for national dissemination by the Right-to-Read Effort.

Highland Park, Michigan developed a High Intensity Tutoring (HIT) program as a Title I project. It is an individualized instructional program in basic skills (reading and math) for remedial students in grades six through eight. The program focuses on peer-tutoring and reinforcement techniques developed primarily from principles of programmed instruction. HIT was also selected for national dissemination through Project Information Packages (PIP).

The last remedial reading program described in the New Jersey survey (White-Stevens, 1978) was developed in Wood County, Parkersburg, West Virginia through Title I funding. The Secondary Reading Laboratory Program is an intensive, individualized diagnostic-prescriptive reading skills program for remedial students, grades seven through twelve. Based on daily monitoring of progress, the SRL teacher determines which materials are appropriate for each student. This program was also approved for national dissemination.

The projects in the New Jersey survey (White-Stevens, 1978) are described in a uniform format that includes an

overview, rationale and development of the program, its essential elements, its goals and results, and information needed to replicate each program. The development and implementation of these programs, along with the other programs previously mentioned, and their reported results, tends to contradict Hill's (1979) contention that corrective reading programs at the secondary level have not been well planned or executed. However, there is no indication, with one exception, that the programs have been adopted, put into use in other schools and proven to be effective. Also, of the eight programs described in this review, only five of them were developed specifically for postelementary students. The survey of the literature did not disclose any secondary remedial reading programs developed or implemented in the state of Texas, which is the primary concern of this present study.

This survey of the literature has demonstrated that some postelementary schools are responding to the needs of students with reading problems by offering remedial reading classes. However, the inconsistency in format, content, and quality and the limited quantity of research available regarding junior high school remedial reading courses are areas of concern which should be investigated if effective remedial reading programs are to be implemented during the coming decade.

Methodology, Instructional Techniques
and Materials for Postelementary
Remedial Reading Courses

Published research and descriptive articles concerning postelementary remedial reading courses seem to be extremely limited in number. Sister Jean Otto (1979) undertook a detailed search of literature from 1963 to the middle seventies to find remedial programs for adolescents using a skills approach, an eclectic approach, or uninterrupted reading. She reported that in spite of apparently high interest in remediating students at the secondary level, few experimental studies were found that dealt with instructional methods or approaches. According to Allington (1980), we know little about actual instruction in American schools. Information on the output of instruction--achievement data--is abundant, but information on the input--what actually goes on in the classroom--is scarce.

Articles reviewing developments in the field of remedial reading often go into great detail describing specific techniques or strategies to use with disabled readers (Harris, 1981; Ashby-Davis, 1981; Pelosi, 1981, 1982). However, they rarely refer to which age or grade level the recommended techniques are intended to be used with or are most effective with. Pelosi (1981), after a review of professional texts, journal articles, and research monographs, found that very little new information concerning specific remedial teaching methods could be uncovered. He points

out that many of the major texts on remedial reading appear to be very similar to those texts published a generation or more ago. Pelosi also discovered from his review of the literature that many teaching procedures and methods recommended for remedial reading do not differ from those recommended for developmental reading. In light of these findings, this section of the survey of literature will deal primarily with current publications concerning remedial reading, relating when possible to postelementary students.

According to Pelosi (1981, 1982), we only have a limited variety of methodologies for remedial reading instruction. He believes that the majority of techniques for remedial instruction can be classified into five specific categories: (1) Fernald kinesthetic techniques, (2) impress methods, (3) guided reading procedures, (4) phonics approaches, and (5) cloze procedures. Pelosi states that the development of remedial reading instruction has added to the ways in which techniques are used, but has not really developed any new approaches. He maintains that we are bound to this limited number of approaches and could benefit by a fuller understanding of these approaches and their role in our present instructional process.

The Fernald approach was among the first documented remedial techniques (Pelosi, 1981, 1982) and undoubtedly the most popular if judged from its frequent appearance in the literature for over fifty years. First reported by

Grace Fernald and Helen Keller in 1921, the Fernald approach (Fernald, 1943) outlines a strict step-by-step procedure emphasizing the tracing and writing of student generated words. Fernald's visual-auditory-kinesthetic-tactile process is based on the belief that: (1) any child can learn to read up to the limit of his intellectual capacity, (2) learning to write precedes learning to read, (3) learning to write is a multi-modality process, and (4) the only appropriate material to use is the creative output of the student. According to Pelosi (1981), the Fernald approach is extremely successful when used in strict adherence to the original steps as outlined by Fernald and Keller in 1921 and again by Fernald in 1943.

A number of kinesthetic methods have developed from Fernald's approach (Pelosi, 1981, 1982). Educators refer to all tracing methods, one of the keys to Fernald's method, as VAKT (visual-auditory-kinesthetic-tactile). Many educators have adapted Fernald's original procedure by eliminating the tracing step and using small groups rather than individualized instruction. This VAK (visual-auditory-kinesthetic) method is essentially the second instructional stage of Fernald's original method. Pelosi refers to this VAK as the Look-Hear-Say-Visualize-Write From Memory Method. This VAK method is commonly used to teach sight vocabulary to both developmental and remedial readers. According to Pelosi (1981), teacher's manuals for any basal

reader or almost any activity book emphasizing word identification will bear out Fernald's original approach as the primary model for most sight vocabulary techniques.

Harris (1981), in reporting on the latest of his three surveys of developments in remedial reading in the United States, focused attention on new developments in treatment. Emphasizing the need for the fields of reading and learning disabilities to grow closer in the future, he reported on medical, psychological, and educational "therapies" which have been investigated during the seventies. One of the educational "therapies" which he reviewed was modifications of the Fernald Kinesthetic method of teaching severely disabled readers. This substantiates Pelosi's (1981) belief that all "new" techniques for remedial instruction are based on old approaches.

Pelosi (1981, 1982) presents a strong argument that the Fernald approach is the basis for the Language Experience Approach (LEA) to teaching reading. According to Pelosi, a close study of the two approaches reveals several common elements: "(1) the child dictates a story, (2) it is recorded in writing, and (3) when a word is learned to mastery level the word is placed into a word bank" (p. 125). Also, he states that the goals of both approaches are the eventual reading of literature and school textbooks.

McWilliams and Smith (1982) developed a method of instruction based on the philosophical approach of language

experience which uses young people's real world experiences to develop more meaningful reading and writing materials. The students write accounts of dilemmas or situations they have experienced, either problems and issues related to their personal lives or to larger issues such as school and society. McWilliams and Smith believe that teachers of older students have been reluctant to use the language experience approach because of its association with younger children and beginning reading and because older students often perceive the situations for stimulating language experiences as contrived and artificial. Research relating the connection between a reader's experiences and printed matter as crucial to comprehension prompted them to develop the experience-based strategy. They conclude that the method is not a complete approach to teaching communication skills, but that it does provide a change of pace that tends to motivate students to read, write, and reason.

Another adaptation of the Language Experience Approach (LEA) was made by Gold (1981) when she combined this approach with the Directed Listening Technique (DL). The resulting Directed Listening-Language Experience Approach (DL-LEA) is a practical solution to teaching content material to students who cannot read the text. In the DL-LEA, rather than talk and write about any topic they choose, the students talk about the subject at hand. The teacher uses the Directed Listening Technique (DL) to prepare and

motivate the students for listening; the students listen to the oral reading of the text; and then, together, the material is discussed and re-written by the students, clarifying any questions or misconceptions they may have regarding the information to be learned. The final product, a student-written summary of content material, is used to teach reading and content skills. Gold states that she has used this method successfully with remedial students from ages thirteen to seventy, although no statistical data was presented in her report. Here is another "new" technique based upon on an old approach to instruction.

Impress methods are another major classification of remedial techniques, according to Pelosi (1981). Impress methods also have a long history and are currently undergoing re-newed interest. This was clearly evident by the number of articles regarding this technique in the current literature. Usually referred to as the Neurological Impress Method (NIM), it was one of the educational "therapies" reported on by Harris (1981) in his review of "What's New in Remedial Reading?" Ashby-Davis (1981) also reviewed NIM as one of the three techniques to use with remedial readers. Henk (1981) presented a paper on the "how" and "why" of NIM and reading at the annual meeting of the Three Rivers Reading Conference in Pittsburg. He believes that the Neurological Impress Method is highly consistent with a number of generally accepted principles of verbal learning

and therefore is a justifiable instructional intervention for a substantial proportion of children who are experiencing reading disabilities. Memory (1981) presented a status report on the impress method, a "new" remedial reading technique.

Actually, the Neurological Impress Method was introduced by Heckelman in 1966. In his report, Heckelman described his original experiment with NIM, carried out in 1961 in the Merced County School in California. The results of his study indicated that the twenty-four subjects, ranging from sixth to tenth graders, showed a mean gain of 2.2 on the Gilmore Oral Reading Test. The greatest time of instruction was 7½ hours for any student. Basically, Heckelman refers to the NIM as a multi-sensory approach to remedial reading. The teachers sits slightly behind the child, a book is held jointly, and the teacher and child read simultaneously, with the teacher directing his/her voice into the child's ear. At the same time, the teacher slides his/her finger along each line, following the words as they are spoken. The student is not interrogated or tested in any manner to determine whether or not he/she is mastering the words, either for recognition or reading comprehension. The major concern is with the style of the reading, not the accuracy. This type of instruction should take place for approximately fifteen minutes a day in consecutive daily sessions for a total of about eight to

twelve hours. According to Heckelman, if the method proves to be effective, there is often a sharp rise in achievement at about the eighth hour of instruction. In his report, Heckelman (1966) offers much detail which would give a teacher directions in using this method. Heckelman maintains that this technique is part of an audio-neural conditioning process whereby incorrect reading habits are suppressed and then replaced with correct fluid reading habits.

Patridge (1979) believes that the most likely objection to the neurological impress method would be the one-to-one basis required for instruction. Heckelman (1966), in his first report on the method, addressed the possibility of using NIM with groups. He stressed that group techniques would not work unless the instructor used a microphone and each child had a headset to pick up the instructor's voice. Otherwise, the children hear each other's mistakes, become disorganized, and lose the effect of the method. Hollingsworth (1978), aware of the time-consuming element of the conventional impress method, conducted a study with intermediate aged remedial readers using the EFI Multi-Channel Wireless Language System. This system, which eliminates the need for the teacher to read, allows each student to hear a tape recording and his/her own voice simultaneously through a headset. The teacher is free to go from student to student, plugging into the individual headsets, to

determine if the student's finger is following along with the words being read. Up to ten students can be successfully monitored in this manner. Hollingsworth found a significant difference between experimental and control groups in reading comprehension as measured on the Gates-MacGinitie Reading Test. The experimental group made one year's growth in a semester, whereas the control group's gain was only 0.04 of a year's growth for the semester. Hollingsworth believed not only that his adaptation of the impress method was effective with remedial readers, but that the students seemed to enjoy the procedure.

Mikkelsen (1981) conducted a study comparing the conventional neurological impress method, using the tape recorder as an alternative to the teacher, and a control group. His results indicated that the tape recorded sessions using teacher assigned materials at the student's frustration level produced significant growth. From these results, he emphasized that the selection of material to be used in this interactive process is extremely important. Mikkelsen believes that the materials should offer challenge to the students and if they are too easy, the effects of the method will be seriously diminished.

Patridge (1979) and Memory (1979) reviewed the research on the impress method in remedial reading instruction. Subjective evidence offered by teachers who had been involved with the research was usually favorable (Patridge,

1979). Teachers and tutors who have used this method strongly recommend it (Memory, 1981). According to Memory, there is little doubt that it is effective in building rapport between teacher and student. This results in a positive atmosphere which can contribute to a better student attitude toward the remedial instruction. However, Memory further states that aside from these informal observations, research tells us little about when, how, or why the impress method can be used effectively. Patridge (1979) suggests that more research on the technique is needed with special consideration given to selecting preferred treatment for individual students.

Another remedial technique which has been receiving attention is the method of repeated readings (MRR) (Samuels, 1979; Chomsky, 1978; Moyer, 1982; Carver & Hoffman, 1981). Kann (1983) suggests that this technique resembles the neurological impress method. Samuels (1979), however, states that the neurological impress method only superficially resembles the method of repeated readings, because with NIM the students read new material at each session. In the method of repeated readings, the student is required to read a short, meaningful passage several times until a satisfactory level of fluency is reached. The main purpose of repeated reading is to build fluency.

The method of repeated readings emerged largely from the teaching implications of the theory of automatic

information processing in reading (LaBerge & Samuels, 1974). According to the automaticity theory, a fluent reader decodes text automatically, leaving attention free to be used for comprehension. In the University of Minnesota Research (Samuels, 1979), fluency was separated into two components--accuracy of word recognition and speed. Samuels believes that for the purpose of building fluency, speed rather than accuracy should be stressed.

Repeated reading is meaningful because the students are reading interesting material in context (Samuels, 1979). Although comprehension may be poor with the first reading of the text, with each additional re-reading the student is better able to comprehend because the decoding barrier to comprehension is gradually overcome. With each re-reading, less attention is required for decoding, leaving more attention for comprehension. Therefore, re-reading builds both fluency and comprehension. Samuels (1979) suggests that an additional technique for building comprehension would be to ask the student a different comprehension question with each re-reading of the passage.

According to Samuels (1979), we do not have tests suitable for classroom use which would tell us if a student is able to recognize the printed words without attention. We have to settle for what may be called indicators of automaticity. Studies (LaBerge, 1973; Perfetti, 1971) suggest

that speed of response may be used as an indicator of automaticity.

Samuels (1979) suggests two things teachers can do to help students achieve automaticity in word recognition: (1) give instruction on how to recognize words at the accuracy level, and (2) provide the time and the motivation so that the student will practice these word recognition skills until they become automatic. Samuels believes that one important function of the repeated reading method is that it provides the practice needed to become automatic.

At the same time Samuels (1979) was researching the method of repeated reading at the University of Minnesota, Carol Chomsky (1978) was using similar techniques at Harvard. In Chomsky's research, she had children listen to tape recorded stories, follow along in the text, rehearse to the point of memorization, and re-read the story until fluency was reached. After four months of using this technique with five disabled readers, oral reading fluency was secured for all five subjects on at least six books, ranging from twenty to thirty pages in length. Also, positive changes in the children's motivation to read and increased amounts of free time spent reading were reported. Chomsky believes that successful experiences gave the students the confidence they needed to move forward on their own.

Neill (1980) believed that repeated readings of the

same passages could be an effective method of turning secondary students on to reading, as well as improve their reading skills. He conducted a study in which he timed the reading and counted the number of words that were pronounced incorrectly. The students, with the help of the teacher, set goals they wished to attain in regards to time and percentage of words correct. After being given the opportunity to re-read silently and study the words that had caused problems, the students re-read the passage. This cycle continued until the predetermined goal had been reached. Then a new passage was selected and the procedure was repeated. Twelve of the sixteen students in the study requested to try it again. One student reduced his original time of 175 seconds to 25 seconds with 100 percent accuracy in pronunciation after 20 trials. Neill emphasized that MMR is not a total reading method, nor for all students, but it proved to be a successful technique with learning disabled and behaviorally disordered students at the junior high level.

Another study which investigated the effect of reading practice in a "repeated reading" format was conducted by Carver and Hoffman (1981). Using a computer-based instructional system, reading disabled students were given reading training with a technique called programmed prose, which allows regular reading material to be automatically converted into training material. The students read and

re-read each programmed prose passage on a PLATO-IV computer terminal until mastery was achieved. Each student received fifty to seventy hours of individualized instruction on the computer, with over twenty measures of progress administered each hour. The results indicated specific gains in fluency. However, Carver and Hoffman believe the effect of reading practice upon gain in reading ability may be limited. They point out that repeated readings may be a promising approach for improving the reading ability of beginning level readers, but for those students who have progressed in reading ability up to about grade five level, such reading practice is not likely to be effective.

Moyer (1982) used a method of oral repeated reading (MOR) with a small number of dyslexic clinic patients at both the elementary and secondary levels. Initially, these readers exhibited an extremely slow reading rate in the face of accurate word identification. She reported that daily practice with MOR consistently resulted in an increase in the rate of reading new material.

Carbo (1978) developed a method similar to the method of repeated readings in which she recorded entire books and parts of books, varying the reading rate and phrase lengths depending upon the reading ability of the students. The students followed the recording aurally (hearing the words), visually (seeing the words), and tactually (tracing under the words with their fingers). Repeating this process with

the same material three or four times, the student would then read the passages aloud. Carbo based her procedures on the research regarding individualized learning styles and the studies that emphasize reading aloud to children to promote growth in vocabulary, word knowledge, and visual decoding. She acknowledged the use of the neurological impress method to improve reading skills, but believed that it did not provide sufficient repetitions. Based on Pelosi's (1981, 1982) beliefs, Carbo's procedures are an application of the Fernald VAKT approach, combined with an impress method.

After three months, Carbo (1978) reported an average gain of eight months growth in reading achievement. Although the study was conducted with second to sixth graders, the highest mean gains were made by the sixth graders. She pointed out that for the first time these students were able to read material on or near their grade level even though their actual reading level was three or four years below grade level. This finding might possibly contradict the belief of Carver and Hoffman (1980) that MRR is not appropriate for older students, and indicate that it could be an effective technique for junior high remedial students.

Some teachers have expressed the concern that the method of repeated readings will be a boring procedure (Samuels, 1979; Moyer, 1982). On the contrary, research studies (Chomsky, 1978; Samuels, 1979; Neill, 1980; Moyer, 1982) indicate that the students were excited by the gains

they made in fluency. The timing and keeping of records of their progress provided strong motivation for continued practice (Neill, 1980; Moyer, 1982). According to Moyer, it is apparent that repetition in some form is a necessary component of reading instruction. Repeated readings in remedial instruction provides the highest possible level of redundancy, exact repetition of a linguistic whole.

Substantiating Pelosi's (1981, 1982) claim that there are no "new" remedial techniques, Samuels (1979) points out that versions of the repeated reading method were used in early schooling. The books used for reading instruction in the seventeenth and eighteenth centuries contained familiar material, some of which the students could recite from memory, but could not read. The students would repeatedly read the passages until they had learned the words and were able to read with some degree of fluency. According to Samuels, theoretical and empirical evidence leads him to believe that the method of repeated readings deserves to be more widely used as a technique for building fluency in reading.

Although Pelosi (1982) did not list the repeated reading method under his classification scheme for remedial reading techniques, he did list imitative reading as one of the impress methods. Imitative reading has a strong resemblance to the neurological impress method and the method of repeated readings. Ashby-Davis (1981) differentiates imitative readings from repeated reading in her analysis of

remedial reading techniques. However, in comparing descriptions of the two methods, it appears that imitative reading was merely a forerunner to MRR. It just has less structure and planning. Chomsky (1978) points out that many young children who watch the page as they are read to often end up knowing a favorite story by heart after repeated listenings. This type of activity is often a contributing factor in cases where children "teach themselves to read" at an early age. Chomsky continues by stating that Edmund Burke Huey referred to the same type of activity and called it the "imitative method" of teaching reading. In discussing different methods of reading instruction, Huey (1908) puts it this way:

Perhaps we should catalogue still another, the imitative method. In the Orient, children bawl in concert over a book, imitating their fellows or their teacher until they come to know what the page says and to read it for themselves. Many an American child cannot remember when reading began, having by a similar method pored over the books and pictures of nursery jingles and fairy tales that were told to him, until he could read them for himself. (p. 274)

He pointed out that the method would have beneficial effects for students having difficulty learning to read. However, according to Pelosi (1982), no empirical follow-up nor mention of imitative reading appeared in the literature until fifty-four years later.

As previously mentioned, one of the main purposes of these so-called impress methods which involve the student

reading and following along while someone else reads aloud is to improve fluency. Another approach for developing fluency is reading aloud to children (Johnson, 1983). According to Johnson, while reading aloud the teacher is "modeling" smooth, fluent reading. While listening, the student is given the opportunity to assimilate appropriate phrasing, pitch, stress, and juncture. The teacher's reading becomes a goal for the student to reach.

While the abundance of research regarding reading to young children and beginning readers is common knowledge, this review found research regarding reading aloud to older children to be almost non-existent. One experiment was conducted by Giernak (1969) in which she read a novel to a class of ninth grade remedial readers over the period of a semester. She gave daily written quizzes which were originally intended to motivate them to listen. However, they soon functioned to improve their thinking/comprehension and writing skills. The questions were rarely literal, but were primarily interpretive, evaluative, or asking the students to predict what would happen next. Eventually the students began to anticipate the quiz questions, so Giernak had them create and answer their own questions. She believed that reading to her secondary remedial students improved their attitude about reading, their listening, thinking, and writing skills, and may have made them more sensitive to other people. Giernak's positive results could suggest to

other educators to investigate further the technique of reading aloud to older remedial students. The idea is certainly not new. As early as 1908, Huey suggested reading to older students when he stated "...the child should long continue to hear far more reading than he does for himself. The ear and not the eye is the nearest gateway to the child-soul, if not indeed to the man-soul" (p. 334).

A third major remedial technique in Pelosi's (1981, 1982) classification scheme is guided reading. He believes that it is virtually impossible to credit any one individual with developing the concept of asking questions about a passage or selection read. According to Pelosi, the development of a structure or set of guidelines for directing reading behavior becomes evident when reviewing early basal readers such as those written by Webster or McGuffey. He compared their structure to today's basal readers and found striking similarities.

Pelosi (1981, 1982) acknowledges that Emmett Betts is often given credit for developing guided reading procedures. Betts (1946) compiled guidelines for teaching reading selections that became known as the Directed-Reading-Activity (DRA). According to Pelosi, the DRA was actually a detailed account of how lessons were presented in most reading texts of that time. Although the DRA is normally associated with developmental, basal reading (Tierney, Readence, & Dishner, 1980), Pelosi points out that it is

frequently recommended as an appropriate remedial technique. The only modification of the DRA for remedial instruction is the use of shorter selections and more time spent on each step.

Stauffer (1969) developed another guided reading procedure which he called the Directed Reading-Thinking Activity. Originally intended for developmental reading instruction, this technique is recommended for use with remedial readers (Tierney, et al., 1980; Pelosi, 1981, 1982). As with DRA, the only modification needed for remedial instruction is the use of shorter selections and more time spent on each step of the process (Pelosi, 1982). The DR-TA can easily be adapted for any selection at any level of difficulty (Tierney et al., 1980).

Although Stauffer's (1969) guided reading procedure bears striking similarities to Bett's (1946) DRA, there are features which clearly distinguish the two. In the DRA, the teacher prepares the student for reading, introducing new vocabulary and establishing the purpose for reading. With DR-TA, new vocabulary words are met in context during reading and the students, rather than the teacher, initiate the purposes for reading. Stauffer believes that reading is a thinking process which involves readers using their own experiences to reconstruct the author's ideas. Directing the reading-thinking process includes the reader in

predicting, reading, and proving, with the teacher serving as a motivator and facilitator.

Although the DR-TA can be recommended as a useful alternative technique to teachers familiar with traditional reading materials, it should not be used repeatedly (Tierney et al., 1980). Repeated use of DR-TA could cause students to become programmed to the strategy rather than involved in reading-thinking activities. Spiegel (1981) believes that the Directed Reading-Thinking Activity is a good alternative to instruction only when vocabulary and background pose no problems, which could be a concern with remedial readers. Also, students may be unwilling or unable to make predictions (Tierney et al., 1980).

Even though the DRA and the DR-TA have been recommended as appropriate remedial techniques (Tierney et al., 1980; Pelosi, 1981, 1982), this review of the current literature found no research reported on their actual use with remedial students. Cautions, or possible problems with the techniques which were suggested by Spiegel (1981) and Tierney et al. (1980), would tend to question their effectiveness as remedial techniques. Research in this area seems to be warranted before these guided reading procedures are implemented in the remedial reading classroom.

Another guided procedure was developed by Manzo (1969). Called ReQuest, Pelosi (1981, 1982) believes that this procedure is probably the only technique in the guided reading

category that was designed specifically for use with remedial readers. Manzo's procedure attempts to improve reading comprehension through a reciprocal questioning situation between teacher and student. Designed to be used on a one-to-one basis, the method provides steps for the student to model the teacher's questioning strategies. Manzo's purpose in designing the ReQuest Procedure was to provide a method for teaching students to raise questions independently and set their own purposes for reading.

Basically, the ReQuest Procedure (Manzo, 1969) involves the teacher and student reading sentence by sentence, stopping after each one to question each other and reach an understanding of the content read. Manzo emphasizes the necessity of teachers using different types of questions, presenting question categories to use as a guideline. Designed to guide the student through as many sentences as are necessary to enable the student to complete the rest of the passage independently, Manzo stresses that it is sometimes necessary to take the process through two paragraphs. Reading beyond this point defeats the purpose of the procedure.

Manzo (1969) tested the ReQuest Procedure by evaluating the gains made by remedial students in a one-to-one clinical environment. Using ReQuest with students ranging from age seven to age twenty-six, he reports that the procedure was quite effective. In fact, it was so effective it led to an

interest in its potentialities in regular classroom settings. Manzo encouraged teachers to try ReQuest first with individual students and then with larger groups.

Tierney et al., (1980) believe that the ReQuest Procedure can work with groups of up to eight students. However, no research has been reported to substantiate this belief. Spiegel (1981) points out that ReQuest is especially appropriate for students who need guidance in thinking above the literal level. Tierney et al. recommend ReQuest as a very effective strategy which facilitates student involvement in problem solving and increases teacher awareness of the students' level of involvement. As this review of literature found no studies of reports of using ReQuest, research in this area would seem necessary to substantiate this claim and establish ReQuest as a viable tool for remedial instruction.

Ironically, whereas no follow-up studies were found regarding ReQuest, which was designed primarily for remedial instruction, studies (Bean & Pardi, 1979; Spiegel, 1980) were found modifying a later Manzo (1975) Guided Reading Procedure (GRP) (designed for use with developmental readers) for use with "corrective" readers. According to Manzo, the GRP is "a relatively simple instructional procedure well-suited to group teaching and content area reading" (1975, p. 289).

Whereas in ReQuest, teachers and students read on a

one-to-one basis, sentence by sentence, through one or two paragraphs of a selection, in GRP, a group or class reads for a certain length of time, depending upon the grade level. Manzo (1975) suggests three minutes for primary students, five minutes for intermediate students, seven minutes for junior high students, ten minutes for senior high students, and twelve minutes for college students. Before reading, the students are charged to remember all that they can. After reading, the students dictate what they remember, the information is recorded on the board by the teacher, and then is organized in some type of outline format. It is at this point in the procedure that the teacher can ask non-specific guiding questions, followed by any specific questions that are needed to develop a fuller understanding of the content. Designed as a means to help students improve their comprehension, recall, and organizational skills, an important characteristic of GRP is that it increases the proportion of student talk in comparison to teacher talk. According to Manzo, the results of two years of developmental research and field testing provide support for the use of the GRP.

Bean and Pardi (1979) employed a modified version of the GRP (Manzo, 1975) to investigate the effect of a guided reading strategy on the short- and long-term comprehension of "corrective reading" students in a seventh grade geography class. The class was participating in a federally

funded program which was providing compensatory education for disadvantaged students. Bean and Pardi added a pre-reading chapter survey and class discussion patterned after the initial steps of Robinson's (1970) SQ3R study procedure, which will be discussed later.

Conducting two experiments, control groups simply read text material and experimental groups participated in the modified GRP described above. In both cases, short-term test results significantly confirmed the facilitative effects of the guided reading strategy on the short-term comprehension of these students. On follow-up tests, administered at a later date, the experimental groups again achieved significantly higher mean scores. Bean and Pardi (1979) report that these results give empirical support to the use of guided reading strategy with these students. They believe that the guided reading strategy field-tested in their study seems to enhance seventh grade corrective readers' short- and long-term comprehension of content material.

Spiegel (1980) adapted Manzo's (1975) Guided Reading Procedure in a procedure which she called a prereading GRP. Used as a prereading activity, her procedure focuses on reminding students of what they already know about the topic at hand and all responses are recorded and numbered on the board. Later, the information is reviewed for inconsistencies, incorrect information, combined when

possible, and categorized. Last of all, the students read in order to determine if all the information they have listed is accurate. Spiegel acknowledges that her pre-reading GRP serves many of the same functions as the traditional DRA (Betts, 1946), but claims that it adds the advantages of diagnosis and increased student involvement and confidence.

As mentioned earlier, Bean and Pardi (1979) referred to modifications they made on Manzo's GRP (1975), in order to use it with "corrective" readers, as being similar to the initial part of the SQ3R study techniques. However, the SQ3R (Survey, Question, Read, Recite, Review) (Robinson, 1970) was not developed as a remedial technique, but as a study method for aiding secondary and college level students with content area material. Robinson, the originator of SQ3R, traces its beginning to the 1920s with a study he conducted at Ohio State University. According to Robinson, when using the basic format of SQ3R, students' scores increased on both comprehension and reading rate and their ability to predict increased.

Johns and McNamara (1980), in reviewing the literature on SQ3R, found it to be one of the most popular study methods. However, even though there were numerous articles written about SQ3R, they reported that none of them presented thorough empirical evidence that SQ3R is more effective than the many other study methods in use.

According to Johns and McNamara, the articles were merely based on favorable opinion. They also pointed out that most of the articles on SQ3R dealt with modifications or applications of the method. From their review of SQ3R literature, Johns and McNamara concluded that more research should be done to determine if SQ3R is a superior reading/study technique.

According to Tadlock (1978), many students do not perceive the value of systematic study techniques and consider them to be time consuming and difficult to learn. Powell and Zalud (1982) believe this to be especially true of many secondary handicapped students. Consequently, they developed an adapted version of SQ3R. Called aSQ3R, their adaptation, in a worksheet format, stresses a very concrete and systematic analysis of text structure, vocabulary, and synthesis of information. Using aSQ3R with sixteen students (age fifteen to nineteen) enrolled in a secondary resource program, the overall grade point average of all but one student increased from nine to seventeen points in a content area of study. With their students, they found aSQ3R to be a viable system. Since mastering content area material seems to be a major problem for secondary remedial readers, there appears to be a need for research in the area of study techniques for this special population.

Along with the guided reading procedures just discussed, Pelosi (1982) also includes advance organizers as a

specific guided reading technique in his classification scheme. Ausubel (1960) developed the concept of advance organizers as the result of an empirical test of the hypothesis that "the learning and retention of unfamiliar but meaningful verbal material could be facilitated by the advance introduction of relevant subsuming concepts (organizers)" (Ausubel, 1960, p. 267). According to Ausubel, the results of his study "unequivocally supported the hypothesis" (p. 271). Simple stated, an advance organizer is "a learning strategy developed by D. Ausubel in which a passage is written to enhance the learning of other material and is presented prior to the other material" (Harris & Hodges, 1981, p. 8).

Although Pelosi (1982) included advance organizers in his remedial classification scheme, he acknowledged that the strategy is only occasionally referred to in reference to remedial techniques, commenting that the technique is basically developmental and most commonly used in developmental programs. This review of the literature found only one study using advance organizers with secondary students, and these were seventh grade students in a small rural junior high school who were not remedial students (Karahalios, Tonjes, & Towner, 1979). In this study, an advance organizer was defined as "a written aid to supplement in an explanatory manner the reading and studying of the text" (p. 707). Basically, the advance organizer was a written

handout explaining the major concepts of the chapter to be read, using a simplified vocabulary. The data indicated a significant difference between the experimental group and the control group, which were assigned to only read the chapter and answer the questions. The pre-reading instruction definitely gave increased performance on the posttest. According to Karahalios and others, and the review of literature for this study, there is little research on the use and effect of advance organizers with secondary students. Karahalios et al. recommend a lengthier, more elaborate study be made with secondary students and, if the technique is to be used with remedial readers as suggested by Pelosi (1982), including remedial readers in the experimental population would seem necessary.

One study (Graves, Cooke, & LaBerge, 1983) which appeared, on the surface, to use advance organizers, investigated the effects of previewing difficult short stories on low ability students' comprehension and recall. Previews, as used in this study, were introductory materials presented to students before they read specific selections. The previews were developed to provide the students with a framework within which they could understand a selection and give them specific information about the contents of the material itself. Even though this description seems to fit the definition of an advance organizer, Graves et al, contend that previews differ from advance organizers in that

they provide specific information about a selection in addition to more general information relevant to the selection.

Actually, Graves and the other investigators conducted two experiments in this study, one with thirty-two eighth graders and one with forty seventh graders. Both groups were Title I funded classes in an inner city junior high school. In both cases, students given previews scored significantly higher on measures of comprehension and recall. The investigators believe that the students generally liked receiving the previews of upcoming stories and found them to be useful. They further believe that giving students previews frees them, at least somewhat, from attending to the details of what they are reading and enables them to give more attention to dealing with higher levels of thinking such as making inferences. These results could have practical implications for remedial instruction.

Inherent in all of the guided reading techniques discussed is an initial step which purportedly prepares the student for reading. Actually, an advance organizer could be considered as the initial step in any reading approach, rather than as a specific guided reading method as suggested by Pelsoi (1982). Harris and Hodges (1981), in defining an advance organizer, explain that in addition to restating the new material in a different way, it may also

be used to draw parallels between something the reader already knows about and the new material. This explanation would link advance organizers with the research involving the effect of prior information or background knowledge (schemata) to reading comprehension, one of the primary goals in the initial pre-reading steps in guided reading procedures.

The concept of schemata, or schema theory, has emerged from interdisciplinary studies directed at a more complete understanding of the complex process involved in reading comprehension (Hacker, 1980). Rumelhart (1981) defines schema theory as basically a theory about knowledge, how knowledge is represented, and about how that representation facilitates the use of knowledge in particular ways.

"Schema theory is quite elaborate and a number of different schema-theoretic models have been proposed" (Hacker, 1980, p. 855), however, it is not within the scope of this study to investigate this body of research, but rather to review any studies related to secondary students, primarily remedial, and the effects of prior knowledge.

According to Stevens (1980), relatively few empirical studies have tested whether or not background knowledge does indeed effect reading comprehension. And of the studies that have been done, ambiguous or altered texts were used. She found that even less research had been done with school-aged children, dealing with school-type texts. Her study, seeking to verify that schemata influences the

efficacy of reading, examined the effects of background knowledge on the reading comprehension of ninth graders. Although it was not designated as a study with remedial readers, it involved 108 students, comprising the entire class of a public school. Therefore, the subjects represented a wide range of reading abilities. Through testing, topics of high knowledge and low knowledge were identified for each student. Two days later, subjects read two individually selected paragraphs and completed multiple choice questions accompanying the passages. Results of the study indicated that knowledge was a significant factor for all ability groups. Possessing high prior knowledge greatly aided comprehension.

Stevens (1982) conducted another study which sought to discover whether direct teaching of background knowledge concerning a topic (providing a schema to students) would have beneficial results in reading passages concerning that topic. Subjects (140 tenth graders) were randomly divided into two groups. The experimental group received instruction regarding the target passages to be read, the control group did not. The results indicated that teaching background knowledge of a topic to readers can improve their reading comprehension on material concerning that topic. Stevens believes her results also support the idea that background knowledge can be taught directly.

Stevens (1982) also believes that some students'

apparent "reading problems" may be problems of insufficient background. Therefore, in order to improve reading one might need to enhance the reader's relevant background information. She emphasizes that practical research into the best methods of imparting background knowledge is desirable, answering such questions as: (1) What specific types of information enhance a given piece of reading? and (2) In what fashion should these schemata be taught? Information derived from these kinds of questions could be incorporated into the various forms of guided reading, possibly increasing their effectiveness as an instructional technique.

The fourth major classification in Pelosi's (1982) scheme for remedial reading techniques refers to various phonics approaches. He lists methods such as the Orton-Gillingham, Gillingham-Stillman, and Slingerland, which are multi-sensory (VAKT) approaches, as were the Fernald methods. The difference in these two major approaches is that the Fernald methods utilize whole words and thoughts, while the phonics VAKT methods concentrate on isolated letters. According to Pelosi, the phonics approaches presently receiving the most attention are those which focus upon sounding and blending of isolated letter sounds. It is common knowledge that phonics (including sounding and blending techniques) has been a topic of debate in American education for over one-hundred years. Remedial reading instruction has relied heavily on phonics instruction.

However, this review of the literature found scant information regarding phonics instruction for secondary remedial students.

Ryder and Graves (1980) conducted a study to determine secondary students' knowledge of eight types of letter-sound correspondences. Their results revealed that seventh and ninth grade low ability readers have not fully mastered certain correspondence types. Furthermore, by the eleventh grade, low ability students have still not mastered the letter-sound correspondence systems. Ryder and Graves believe that the results of their study have several pedagogical implications. First, mastery of letter-sound correspondence is related to reading ability, even in the secondary grades. Second, low ability students are capable of internalizing letter-sound correspondence and show substantial control of some of them, even at the seventh grade. Therefore, they believe that if low ability seventh graders still have some correspondences to master, instruction in those correspondences for some low ability junior high students seems warranted.

Groff (1980), in reviewing some of the pros and cons of teaching phonics in the middle school, concluded that the best recommendation was to continue to teach phonics in the middle school, but only to those pupils who have not acquired this knowledge. This recommendation substantiates the point of view held by Ryder and Graves (1980). Groff

emphasizes that another question to be considered is how to make phonics instruction appealing to the middle school student who needs it. He believes that it is best if phonics instruction is given in a game-like atmosphere that is as different from typical primary-grade instructional procedures as possible. However, Groff does caution that teachers must be careful not to forget a systematic approach, an organizational plan that directs when to teach certain phonics skills.

If phonics instruction is one of the most popular remedial techniques, as suggested by Pelosi (1981, 1982), and if the question of the merit of phonics teaching in the middle school has become highly controversial, as suggested by Groff (1980), it seems apparent that current research is needed to address these concerns and provide a rationale for secondary remedial instruction. Ryder and Graves (1980) suggest that an improved tabulation of the letter-sound correspondences in a large corpus of English words should be made. This tabulation should include surrounding letter environment, and, possibly, stress and syllabication. They believe that such information would provide some indication of the appropriateness of phonic materials currently being used, both in beginning reading and remedial reading programs. Ryder and Graves also believe that this type of information would serve to stimulate research examining the effectiveness of teaching letter-sound correspondences.

Pelosi (1982) designates cloze procedures as the fifth and last of the remedial reading techniques in his classification scheme. He acknowledges that some might question the inclusion of cloze procedures as a major remedial technique, along with impress methods, guided reading procedures, kinesthetic techniques, and phonics approaches. However, Pelosi believes that because of the increasing popularity of cloze as an alternative approach for focusing upon both word recognition and comprehension skills among remedial reading populations, it should be included as a major remedial technique.

In reviewing research on cloze procedures, this method would appear to be a relatively new technique. Introduced by Taylor (1953) as a tool for measuring the readability of discourse; later adapted by Bormuth (1967, 1968) as a testing instrument to determine students' reading levels; cloze procedures only began to make their way into the classroom in the early seventies (Jongsma, 1980). In Jongsma's (1971) first review of the literature on cloze as an instructional technique, only nine studies were reported. His latest review of cloze as an instructional technique (Jongsma, 1980) reports on thirty-six studies, all, with the exception of one, conducted since his first publication.

When one mentions "cloze," most reading teachers and specialists have an understanding of both its meaning and use. Common elements in using cloze procedures

instructionally are: (1) the deletion of a letter, word, or phrase from the text, (2) a set percentage or criteria for evaluation, and (3) the regulation of the number of words per selection (Pelosi, 1982). Here again, even though these instructional procedures seem new, they are based on an old idea--that of deriving meaning from context. Huey (1908) emphasized the importance of context in reading comprehension throughout his classic text, The Psychology and Pedagogy of Reading. Other educators across the years have emphasized the need to instruct readers in using context effectively. Artley (1943), McCullough (1958), and Ames (1966) each developed a list of context clues which they believed were aids to comprehension. Cloze procedures have become a viable tool for practice in using these context clues.

This review of cloze literature found several studies and reports published since Jongasma's (1980) latest report (Schoenfield, 1980; Dupuis, 1980; Marino, 1981; Neville & Hoffman, 1981; Valmont, 1983). Most of these reports involved the rationale behind using cloze procedures instructionally, along with frameworks for developing cloze procedures (Schoenfield, 1980; Marino, 1981; Valmont, 1983). However, two articles (Dupuis, 1981; Neville & Hoffman, 1981) addressed studies which had been conducted with secondary students.

Based on the language experience approach (LEA)

research, Neville and Hoffman (1981) investigated the effects of using personalized stories with seventh grade retarded readers. After administering questionnaires to acquire information about the subjects, personalized stories were written for each subject from which cloze forms were constructed. Given both the personalized and a non-personalized story, the subjects scored significantly better on the personalized cloze stories.

Although Neville and Hoffman (1981) concluded from their study that the personalization of the stories did have positive effects on the level of comprehension, they admitted that the question of practical significance must also be asked. Personalizing stories for each student is time-consuming and difficult. They pointed out that more research is needed to identify specifically the effects of personalization.

The other cloze study (Dupuis, 1980) did not deal with the procedure as an instructional technique, but rather as a tool for matching students' reading levels to appropriate literature selections in secondary English classes. Dupuis acknowledged that the use of cloze to predict reading levels had been well established, but she believed that it had not been well authenticated with literature. Procedures of the study had tenth graders read two short stories and a novel. Each had been pretested with cloze procedures and were posttested with a multiple-choice comprehension test.

Her results did support the cloze as a predictor for short stories. Although conducted with regular students, these results could have implications for assisting remedial reading teachers in matching their students with appropriate literature selections.

Based on the research to date, the various modifications of cloze procedures seem to provide an effective technique for the instruction of specific skills (Schoenfield, 1980). According to Schoenfield, mastery of the processing skills required by these modified cloze procedures provides the student with a powerful tool that could be used in any reading situation. Therefore, cloze procedures could be a viable technique for the remedial reading classroom. However, Jongsma (1980) points out that we must be cautious in transferring our knowledge about traditional cloze formats to modified formats until sufficient evidence supports such a transfer. He contends that there are a number of unanswered questions regarding cloze instruction which could be addressed by future research, but the two major areas for investigation should be the issue of selective deletion and alternative methods of sequencing cloze instructional activities. Jongsma hopes that "the results of future research, combined with our current state of knowledge, will lead us to more judicious and effective use of the cloze procedure as a teaching technique" (1980, p. 31).

According to Pelosi (1981), there are a number of methods or approaches that are difficult to classify under one or more of the basic techniques discussed. In reviewing the current literature, most of the studies concerning remedial reading are aimed at one specific aspect of reading instruction, describing strategies that could be used supplementally with several different methods or approaches to instruction. The largest number of such articles in the postelementary remedial literature, by far, dealt with sight word and/or reading vocabulary development (Floriani, 1979; Blanchard, 1981; Aaron, 1981; Barrett & Graves, 1981; Lindsey, Beck, & Bursor, 1981; Hillerich, 1981; Miccianti, 1981; Haggard, 1980, 1982).

The reason for the interest in developing a sight reading vocabulary is probably best explained by Floriani (1979). He contends that reading problems vary in type, severity, and complexity, but certain characteristics remain constant, pointing out that remedial readers invariably have restricted sight vocabularies and an inconsistent method of word attack. Floriani developed a technique which he called word expansions. Based on systematically creating new words from known words and practicing them in context, remedial readers improve their word attack skills. Although Floriani did not present any statistical data giving support to his technique, he did share one case study of a thirteen year old seventh grade boy who had a history

of reading problems. Using the word expansion technique with this student allowed the student to meet with success and feel progress. According to Floriani, the student began to see himself as a reader and became more consistent in his method of word attack. Floriani reported that this word expansion technique had proved effective in helping other learners develop sight vocabularies and consistency in word analysis.

Barrett and Graves (1981) developed a vocabulary program for junior high remedial reading classes which was based on 180 words selected by science and social studies teachers. Their research revealed that although vocabulary knowledge is widely recognized as an important component of reading ability, systematic vocabulary instruction is seldom provided beyond the primary grades. Techniques used in their instructional program included direct instruction, chunking or categorizing, and the use of context clues and word parts in unlocking meanings. Barrett and Graves conducted a study to evaluate their program. From the results, they strongly recommend teaching content vocabulary as a part of a secondary remedial reading program, using the techniques of direct instruction, chunking and categorizing, and context clues.

Lindsey, Beck, and Bursor (1981) support Floriani's contention that one very common weak spot among reading disabled adolescents is sight vocabulary. The strategy

they advocate for developing this sight vocabulary is an analytical-tutoring method. Basically, this approach first uses analytical reading principles to develop sight vocabulary and then involves the student in doing cross-age tutoring with a young learner. According to Lindsey et al., the most common analytic method used today, the whole word approach, is considered to be the most successful with students with specific kinds of learning difficulties common among poor secondary readers. They recommend teaching basic sight words (i.e. those more frequently found in print) and phonetically irregular words, with either Ekwall's (1977) method or a combination of the language experience approach combined with the VAKT techniques developed by Fernald (1943). In Ekwall's method, the student uses contextual clues, configuration clues, and structural analysis, as well as focusing on a word as a whole unit. However, Lindsey, Beck, and Bursor believe the LEA/VAKT method to be the most powerful for developing word recognition or analytic reading skills. The next component in their method is tutorial, in which the learner becomes the teacher. The adolescents' analytic reading skills are reinforced as they teach the words to younger students, who may be either good or poor readers. Lindsey et al. believe that a teacher can be reasonably certain that a student will master a word if that student teaches the word to another student. Cross-age-peer-tutoring will be discussed

in more detail later on. Here again, as with Floriani's (1979) report, no supporting data was provided.

Aaron (1981) presented a "Seven Step" method to help remedial readers master reading vocabularies. Two concerns were paramount in his design. The first was that remedial students need more positive feedback about their behaviors. Therefore, his design included a large number of small-scale behaviors which provided for a high level of success. Secondly, the development of a vocabulary of words known on sight was necessary to begin reading. Aaron's "Seven Step" plan meets these needs. Also, the student is involved in listening, speaking, visual memory, and visual-auditory perception activities, speed recall, VAKT spelling activities, and words used in sentences and in text. Aaron believes that following his process, which is described in detail, should "free the pupil from laboring over word-calling and make it possible to more successfully comprehend the concepts in the story" (1981, p. 93). Again, no supporting data was given.

A study by Hillerich (1981) examined the assumption that any student reading at a second- to third-grade level or beyond who can recognize the basic form of a word will also recognize regularly inflected forms of the same word. According to Hillerich, this belief is encouraged by various readability formulas, previous research has not investigated this aspect of recognition vocabularies, and

professional texts on the teaching of reading avoid the issue. Testing fourth grade average students and fifth to ninth grade students reading at about fourth grade level, his results suggest that recognition of one form of a word is definitely no assurance of recognition of another form. Hillerich concludes that we must continue to teach important structural elements. However, teachers must be aware that such instruction will not automatically add to students' recognition vocabularies.

Miccinati (1981) believes that many disabled readers have difficulty decoding words, partly due to the fact that with these learners, perception and analysis of distinctive features do not take place automatically. She points out that students must be taught to perceive these distinctive features in words and then learn to compare and contrast cluster patterns. According to Miccinati, the Glass-Analysis Method is the best tool for teaching the distinctive features in words. The method involves an active stimulus-response process in which the learner's attention is focused on distinctive clusters of graphic features related to particular sounds. Miccinati describes the Glass-Analysis process, along with modifications she believes to be effective with disabled readers, but provides no data to support these methods as effective instructional techniques.

Blanchard (1981) developed a strategy for middle

school disabled readers which, although he refers to it as a comprehension strategy, has the mastery of a sight word vocabulary as a key element. In his strategy, complete word recognition and pronunciation mastery of all words to be read, both in the passages and in the accompanying questions is required. This mastery is accomplished through drill, rather than through specific vocabulary instruction. The process involves listing all the words in a short passage and the accompanying questions, making flash cards for each word, and practicing for rapid identification (within two seconds). The student must master all the words before reading the passage and answering the questions. Reporting on two studies he conducted with sixth graders, Blanchard's results indicate that for readers whose grade placement levels were within a year of the estimated readability of the materials, isolated decoding practice did not enhance literal or inferential comprehension. However, for those whose reading performance was two or more years below the level of the materials, isolated decoding practice did help literal and inferential comprehension. Blanchard believes these results offer a reason for the controversy between some reading educators as to whether or not isolated decoding practice can enhance comprehension. He points out that for the poorest readers, it apparently does, but for the less handicapped, it apparently does not. Blanchard did emphasize that this is not a strategy to be used with

beginning readers, but rather a supplemental strategy to use with disabled readers whose reading achievement has been minimal and who need positive reading experiences to build confidence.

The last of the vocabulary reports reviewed (Haggard, 1982) was more of an approach to meaning rather than sight recognition. Based on research that identified peer group usage and immediate usefulness as the most frequently cited resources for learning new words during adolescence, Haggard developed the Vocabulary Self-Selection Strategy (VSS). The process involves student selection of words to be learned, along with student definitions and reasons why these particular words should be learned. After the list has been compiled by the class, different activities take place in which the words are used in a variety of ways. According to Haggard, VSS is adaptable to a variety of class sizes and can be effective with disabled readers. Describing the method in detail, including what to expect from the students and the advantages of VSS, she emphasizes that it is an integrated, holistic approach to vocabulary development. No data was presented to support the use of the method.

Each of the educators addressing the development of sight word and/or reading vocabularies pointed out that this is a major area of difficulty for remedial readers. Each one presented a method or strategy which purported to

remediate in this area. However, of the eight articles reviewed, only three (Barrett & Graves, 1981; Blanchard, 1981; Hillerich, 1981) presented data derived from experimental studies. It seems apparent that research needs to be done to determine if, in fact, recognition vocabulary is a major area of difficulty for disabled readers and, if so determined, further research to test the effectiveness of the various strategies being recommended for instruction in this area.

This review of the literature noted a trend toward using a writing approach to the teaching of reading (Maya, 1979; Hennings, 1982; Stotsky, 1982; Trosky & Wood, 1982). However, only one article was found regarding the use of writing in the remedial classroom. Smith (1982) presented a case study of a twelve year old boy who was participating in a remedial program at the State University of New York at Albany. This student "requested" to have writing in his program, stating that he had never written anything except letters. Consequently, Smith included writing process instruction twice a week in his remedial program. By the end of the semester, the student was formulating questions, researching topics, and doing extensive revision. But more important than that, the end-of-the-semester testing indicated that he was finally reading at grade level, having jumped from a beginning fourth grade to an end of sixth grade level. Smith did acknowledge the fact that perhaps

direct instruction in his word analysis skills may have accounted for much of the gain. However, she believed that his writing seemed to help him understand complex syntactic representations and integrate his word analysis skills more readily. Another added benefit was that the student's enthusiasm for writing spilled over to his other work.

Smith (1982) admits that her report only documents one student's development in reading and writing, yet she believes that it raises some seldom asked questions about the possible advantages of integrating instruction in writing into remedial reading programs: (1) How do developmental aspects of writing relate to progress in reading? (2) Does development in one mode facilitate development in the other? (3) Are disabled readers necessarily disabled writers? and, (4) What clues to their reading problems might be found in their writing? According to Smith, few remedial programs effectively integrate reading and writing. She believes that it is time to take a close look at what the burgeoning writing research has to offer for remedial reading instruction. "Integration of reading and writing, with attention to the interrelationship of the developmental aspects of each, might provide another avenue for assisting the remedial reader, as well as providing additional diagnostic data for the remedial reading teacher" (Smith, 1981, p. 252).

Another trend in remedial reading indicated by current

literature is the use of student tutors, both peer and cross-age (Mavrogenes & Galen, 1979; Eckel, 1980; Hiebert, 1980; Bohning, 1982; King, 1982; Yogev & Ronen, 1982; Sindelar, 1982; Wheeler, 1983). As mentioned earlier, Lindsey et al. (1981) included a tutorial component in their strategy for developing adolescents' sight vocabulary. They point out that cross-age tutoring not only provides numerous settings for reinforcement, but also provides the incentive for continual review of words. Other benefits which Lindsey and others believe to be inherent in the very structure of their program are building self-confidence and improving attitudes.

Peer tutoring is by no means new (King, 1982). It is common knowledge that students learned from other students in the one-room schoolhouses of long ago. In the Lancastrian system, the schoolmaster taught older students who, in turn, taught the younger students. According to King (1982), one of the reasons for this renewed interest in peer assisted learning is the trend toward austerity in public spending. Many programs which had given individualized attention are being eliminated or severely restricted.

In 1979, Mavrogenes and Galen presented an overview of the research on cross-age tutoring which had been conducted during the decade of the seventies. Although overall results were favorable toward the achievement of both tutors and tutees, they caution that much of the research lacked

good design. However, they were impressed by the almost unanimous enthusiasm reported in all of the studies reviewed.

The attention to peer tutoring/assistance has continued into the eighties. Hiebert (1980) outlined activities in which teachers could use peer interaction. She contends that since students outnumber adults in most classrooms twenty or thirty to one, the learning opportunities in a reading program can be multiplied many times if teachers include peer-directed activities. She also emphasizes that the reading development of students can be enhanced through opportunities to teach peers and learn from them.

Several experimental studies were reported that extol the use of peer tutors. Sindelar (1980), comparing the effects of three cross-age tutorial programs, reported such significant results that he believes such programs, used in conjunction with repeated readings, or oral reading practice, may well be the most effective supplemental approach available for remedial reading instruction. Eckel (1980) reported on a pilot study conducted in the Department of the Defense Dependent School's Pacific installations in which student tutors were trained to work with remedial reading students. In some cases the remedial reading classes were divided in half and the better readers tutored the poorer readers. Their results indicated significant reading achievement for both the tutors and the tutees, with the

largest gains occurring in word attack. Yogev and Ronen (1982) examined the effects of cross-age tutoring on the tutors' empathy, altruism, and self-esteem. The results of their study indicate that cross-age tutoring significantly increases the tutors' empathy, altruism, and self-esteem. Since previous studies in this area had mainly focused on the academic achievement of tutors, Yogev and Ronen believe that their focus on the psychological processes involved in cross-age tutoring suggests that tutors may benefit in other ways, as suggested by Lindsey et al. (1982).

King (1982) described a form of peer tutoring which he found to be successful, the PAL Program (Peer Assisted Learning). Emphasizing that PAL is more a philosophy of instruction rather than an instructional program, he pointed out that it is characterized by an attitude of openness on the part of the teacher to use all available resources to meet individual needs. Conducting an "elaborate" experimental program with PAL, using cross-age tutoring with seventh and third graders, King reported that both the tutors and tutees had significantly higher reading scores on posttesting. He followed this investigation with several informal studies using intra-grade tutoring with remedial reading students. Here again, after twelve weeks of instruction, both the tutors and tutees showed significant gains in reading achievement.

Each report on peer tutoring reviewed for this study had one thing in common--they all presented an enthusiastic outlook regarding the use of peer tutors in remedial reading instruction. Another point of consensus in the reports was the need for systematic organization of a tutorial program and proper training of tutors. Bohning (1982) developed a Tutoring Resource Guide, which is described in detail in his report, to assist teachers in such organization and training. In light of the evidence in these reviews, secondary teachers of remedial reading might possibly consider peer tutoring as a viable alternative to incorporate into their reading instruction.

When considering approaches to teaching remedial reading, it is common knowledge that the term "individualized" reading instruction usually emerges. However, in the current literature, information regarding individualized reading instruction is scant. According to Marcetti (1978), many experts in the field of reading do not consider individualized reading to be a method of instruction, but rather a plan of organization in which many methods of teaching are used. In many secondary reading resource rooms, individualized reading means an organizational plan in which students work through "auto-instructional" materials according to diagnosed needs, with the teacher only acting as a trouble shooter: assisting with problems, correcting papers, evaluating progress, and adjusting assignments (Haggard, 1979).

Others, according to Marcetti (1978) and Bell (1981), view individualized reading as a means of teaching reading through pupil self-selection of reading assignments and materials, according to self-perceived needs and interests, followed by self-paced progress through these materials. It is not within the scope of this review to debate the issue of whether or not individualized reading is an approach to teaching reading or a system of organization, but, rather to present what the literature reports that could be beneficial to those responsible for developing or teaching a postelementary remedial reading class.

Marcetti (1978), realizing that a great deal of time had been spent in the previous ten years in the development of individualized approaches to teaching remedial reading, and further realizing that the term individualized reading means many different things, felt the need to survey current approaches to this type of instruction. Basically, what he discovered was that reading experts have failed to reach an accord as to the best way to individualize a secondary reading program, with each author presenting his/her program as the most effective way to individualize. However, there was some agreement that some form of grouping is an important part of individualized approaches to instruction, self-selection of materials was emphasized, and there was a need for both formal and informal diagnosis.

Compiling the results of his survey, Marcetti (1978)

reached the opinion that the most effective individualized reading programs at the secondary level must be a combination of many different ideas and methods. He emphasized that a student could become lost in a totally individualized program, therefore grouping and class interaction should be an important part of any individualized program. Haggard (1979) emphasized that secondary remedial students are not independent learners and need sustained interaction with the teacher. According to Marcetti (1978), the "guidance and reassurance a teacher can give cannot be replaced by a packet or individualized skill building material or a workbook" (p. 53).

In a recent survey of the status of individualized instruction, Rothrock (1982) polled authorities in the area who had administered programs, done research, written or lectured on the topic, or who were known in the field. Most agreed that individualized instruction is on the decline and, although a good word, is seldom found in practice. They believe that part of the reason for the decline is that the movement for individualized instruction progressed too quickly, without offering the necessary staff development for teachers, consequently, teachers did not know what they were doing.

Even though current research concerning individualized reading is scant, some new programs have been developed (Whitfield & Dickey, 1980; Bell, 1981). According to

Whitfield and Dickey, because students differ and learning problems differ, reading instruction must differ. This could call for an individualized approach in order to meet specific student needs. The program they developed includes diagnosis (all kinds), grouping, a balance of methodology/ approaches, and a personalized reading approach. Described in great detail, they also include materials and test selection to be used with the program. Whitfield and Dickey emphasize that quite often remedial students show more achievement with small group instruction.

Bell (1981) presented another type of individualized reading program based on the self-selection of books from a wide variety of subjects and at a wide range of reading levels. The highlight of her program involved teacher-student conferences. Other aspects of her program included book sharing with the other pupils and grouping for skills instruction. Both of these individualized programs (Whitfield & Dickey, 1980; Bell, 1981) include the components Marcetti (1978) found to be important in an individualized program for secondary remedial readers and, therefore, could provide direction for implementing postelementary remedial reading programs.

Along with individualized instruction, another term that usually appears when remedial reading is mentioned is diagnostic-prescriptive instruction. However, current literature related to the subject is practically

non-existent. Actually, diagnostic-prescriptive reading instruction, based on the idea that individual strengths and weaknesses of students are identified and appropriate instruction is given, depending upon the findings (Cheek & Cheek, 1983), is inherent in the individualized approaches just discussed (Marcetti, 1978; Whitfield & Dickey, 1980; Bell, 1981).

It could probably be argued, as in the case of individualized reading, that diagnostic-prescriptive reading instruction is not an approach to teaching reading but an organizational system. According to Cheek and Cheek (1983), a variety of materials and teaching techniques can be used in prescriptive instruction. Therefore, methods of teaching reading previously discussed could be used to facilitate the diagnostic-prescriptive organizational plan. In fact, Cheek and Cheek strongly recommend the guided reading approach, which Pelosi (1982) considers to be one of the major remedial techniques, as probably the best method for providing remedial instruction.

Much of the current literature reviewed for this study merely described strategies or techniques of instruction without supplying empirical data to support their effectiveness. According to Criscuolo (1979a), "it is essential that concrete results and promising instructional strategies be examined and used whenever feasibly in shaping effective reading programs in the secondary school"

(p. 32). With the nationwide emphasis on Back-to-Basics, and the expansion of remedial reading programs in the post-elementary schools, it appears that more research is necessary in order to produce these "concrete results" on which to base new programs and revise and improve the effectiveness of existing programs.

As for materials for use in the postelementary remedial reading programs, the publishing business has created a plethora of materials from which to choose. Early (1973) views this as a favorable sign, commenting especially on the wider choice of paperback books, strikingly illustrated, and with mature content aimed at less able readers. She specifically referred to The Globe Book's Living City Adventure Series; the Field Enterprises' Kaleidoscope Readers, and Checkered Flag series; the Scholastic publications; and the Reader's Digest's Story World, a paperback anthology series especially for middle school.

These books referred to by Early (1973) and other similar books aimed at the older remedial readers have come to be known as Hi-Lo books, standing for high interest-low reading level and/or vocabulary (Dubrovin, 1979; Thypin, 1979; Mason, 1981a). According to Mason (1981a), high interest-low vocabulary books written especially for remedial readers are a relatively recent development and the term to describe them even more recent. However, he points out that the interest and need for such material dates back

to the middle twenties. Reviewing the history of reading materials for poor readers, Mason reports that literature of the thirties and forties indicates a great interest in material for poor readers. That interest was heightened by the large number of illiterates entering the armed services in the early forties. However, although the need was recognized, few high interest-low vocabulary books were available at that time. During the forties, a few paperback books came on the scene and more publishers began to come out with individual hi-lo titles. Also, during the fifties, lists of high interest-low reading level books were published.

Mason (1981a) emphasizes that not all of these early books were good. Many were choppy and disjointed in order to earn a low readability level score based on one of the popular formulas, all of which involve the difficulty of vocabulary and sentence length. Thypin (1979) stresses that these readability formulas only provide a global measure of the difficulty of printed material and are not "magic rulers" for assessing the appropriateness of printed material for a disabled reader. In fact, more than twenty years ago, McCracken (1959) provided empirical evidence that re-writing material into a supposedly simpler form often made it harder to comprehend.

The need for high interest-low vocabulary materials, combined with observations such as those made by McCracken

(1959) regarding the comprehensibility of materials written/re-written according to the readability formulas, created a real problem for reading specialists (Mason, 1981a). Some of the answers to this problem, Mason believes, were solved by the body of research concerning children's syntax, which concluded that children comprehend best those written language structures most similar to their own writing. In fact, Smith and Mason (1972) recommended that sentence length not be reduced in order to cause hi-lo passages to earn low readability scores. They contend that simple vocabulary for books for poor readers appears to be warranted, but short sentences do not. "The choppiness and lack of comprehension resulting from overuse of formulas and over-shortening of sentences can be avoided by writing sentences that conform not to a readability formula but rather to the oral and written language construction of the intended reader" (Mason, 1981a, p. 607).

Thypin (1979), in developing guidelines for the selection of high interest-low reading level books, also stresses the use of other criteria, rather than readability formulas. The first guideline she suggests is that the content of the books should be appropriate and relevant to the interests and/or informational needs of the reader. "Wanting to discover what is written is the key to wanting to be able to read the printed text" (p. 75). According to Thypin, publishers of hi-lo books have greatly extended the

variety of themes, which she believes to be particularly important because disabled readers frequently demonstrate less flexibility in reading interests than high-ability students.

The second guideline for hi-lo book selection (Thypin, 1979) is that content difficulty be differentiated from the level of reading difficulty. One of the purposes of hi-lo books is to present material that is more mature in content than juvenile books while maintaining the same low-reading level. Thypin emphasizes that the content level of the text does not depend upon the level of readability, offering the following examples:

The question is to be or not to be.

Reading level - first grade
Content level - high school

Homo sapiens are omnivorous bipeds
cohabitating among the stalagmites.

Reading level - high school
Content level - fourth grade (p. 75).

According to Thypin, the content level is related to the level of concepts and the interest level in the text and a superficial review of either the appearance or content may be insufficient to assess the readability of a book for a target reader.

The third guideline offered by Thypin (1979) in the selection of hi-lo books is that the concepts and cognitive skills required for comprehension of the text be within the

intellectual grasp of the reader. For disabled readers who have a low level of cognitive skills, inadequate for their chronological age, the conceptual load of printed materials should be at or only slightly above their own level. On the other hand, some disabled readers demonstrate an adequate or high level of cognitive skills. The materials for these readers could have a considerably higher conceptual level than their depressed reading levels.

Because there is this need to match readers with printed materials appropriate to their cognitive levels and because Thypin (1979) believes the teaching of reading can directly affect the development of cognitive skills, she emphasized the advantages of the hi-lo books over basal readers for remedial readers. Basal readers are developed for normal developmental readers, therefore the cognitive requirements are as low as or the same as, the readability levels. If disabled readers are exposed only to basal readers at their reading level, they are not exposed to concepts at an appropriate level, nor are they required to comprehend material needing higher cognitive skills. According to Thypin, high interest-low reading level books are designed to incorporate these elements in the text. At this point, it is interesting to note that this review of the literature found no other reference to using a basal series with remedial readers. However, it is common knowledge that such practices do exist in secondary remedial

reading programs in Texas. In light of this knowledge and of Thypin's observations regarding basal readers, perhaps further research in this area is needed.

Other guidelines presented by Thypin (1979) substantiate the recommendations made by Mason (1981a) and Smith and Mason (1972). She suggests that the vocabulary of the text be on the oral language and reading levels of the reader and that the sentence patterns in the text approximate the syntactic competence of the reader. Her last guideline for selection was that the text be appealing and interesting in appearance. Even though these guidelines were offered as aids in selecting commercially produced books, Thypin points out that they may also be used as an aid in the development of teacher-made materials.

For those teachers who do wish to develop their own materials and/or authors who wish to attempt to write hi-lo books, Dubrovin (1979) presents an interesting concept. She maintains that the hi-lo book is a new form of children's literature, with a unique story structure. Dubrovin claims that the hi-lo book is neither a juvenile novel nor a short story, but rather a "stepping stone" which spans the distance between the two forms, synthesizing characteristics from each one.

Listing the characteristics that she feels are necessary for a good hi-lo book, Dubrovin (1979) acknowledges that most of the recently published books do meet these

criteria. The emphasis in these newer books is upon comprehension and, like Thypin (1970), Dubrovin reports that a much wider range of high interest topics are available. She believes that many of the hi-lo books are missing "literary merit"--involving depth, meaning, theme, and message. This is due to a concentration on structure and readability. According to Dubrovin, the need for depth should be one of the greatest concerns of the new writers of hi-lo books, cautioning that simple structure does not necessarily demand a simple-minded message. She predicts increasingly dramatic improvements in good literature for problem readers.

Rossi and Blacher-Dixon (1980) agree with Early (1973), Thypin (1979) and Mason (1981a) as to the availability of many excellent series of high interest-low reading level books. They made special mention of the PAL series by Xerox, the Action series by Scholastic, and several series by Fearon-Pitman, commenting that these and other such books are used by many teachers, both for independent reading and/or one-to-one oral reading. Rossi and Blacher-Dixon (1980) also contend that practice in specific basic skills, using workbooks for exercise in particular areas of weakness, is also necessary. According to their belief, there is a need for materials which would allow students to study independently at their own respective levels and speeds, with a minimum of guidance from the teacher. Consequently, they surveyed secondary remedial reading teachers

in order to determine if such self-instructional materials were being used and, if so, which materials. Of the twelve teachers consulted, all but one relied heavily on some type of workbook for the development of basic word attack skills. However, they also found that such materials seemed to be in short supply.

In order to evaluate the materials being used, Rossi and Blacher-Dixon (1980) developed a checklist which included criteria for the sub-sections of: format, teaching approach, skills content, relevance to students' individual educational plans, and utility. Of the thirty-one materials evaluated, all included workbooks to be used either individually, in a series, or in conjunction with cassettes. In their search for the materials to evaluate, they found more age-appropriate materials than had been anticipated. However, only three of the materials evaluated met even 75 percent of their established criteria. Therefore, they concluded that there does appear to be a genuine lack of appropriate materials available for teaching decoding skills to secondary remedial students.

Even though Rossi and Blacher-Dixon (1980) advocate using some type of workbook format to teach decoding skills in secondary remedial reading programs, and eleven out of the twelve teachers they surveyed did, in fact, use such materials, no other mention was found in the literature regarding their use. On the other hand, recent literature

(Taylor & Waynant, 1978; McWilliams, 1979; Cassidy & Shanahan, 1979; Joynes, McCormick, & Heward, 1980; Vacca & Vacca, 1981; Gambrell & Cleland, 1982) indicates a growing trend favoring the use of functional/survival materials in the remedial reading classroom. Some reading educators (Cassidy & Shanahan, 1979; Vacca & Vacca, 1981; Gambrell & Cleland, 1982) believe this emphasis on functional reading is largely due to the public dissatisfaction with education and the resulting Back-to-Basics and minimum competency movements.

Vacca and Vacca (1981) believe that such basic competency programs must emphasize the functional teaching of reading and should be based on two principles of instruction: (1) reading is never independent of meaning; and (2) reading is never independent of function. In other words, functional instruction centers around applying skills to real-life tasks, with skills never being taught or practiced in drill isolated from their actual use in a real reading situation. Although Cassidy and Shanahan (1979) use the term "survival" rather than functional, they do acknowledge that the term is a misnomer, and the two terms (functional and survival) are used interchangeably in the literature, with the same basic meaning.

Even though publishers are developing materials to teach functional skills (Cassidy & Shanahan, 1979), most of the reading educators (Taylor & Waynant, 1978; McWilliams,

1979; Cassidy & Shanahan, 1979; Joynes, McCormick, & Heward, 1980; Vacca & Vacca, 1981; Gambrell & Cleland, 1982) recommend using "real" materials that students will actually encounter in their real world, by-passing artificial materials found in workbooks and kits. Typical materials include television schedules, bus, train, and airline schedules, directions, job-applications, want-ads, menus, labels, phone-books, etc. Vacca and Vacca (1981) emphasize that not only should functional reading materials be real, but should be relevant to the students' developmental expectations. For example, the classified section of the newspaper would generally be irrelevant to seventh graders as they are not yet old enough to enter the job market. According to Taylor and Waynant (1978), real word relevance should be determined from the students' point of view. They found that having students keep logs of the things they read outside of teacher directed instruction in reading helped plan more appropriate functional reading programs.

Another consideration in the use of functional materials is the frequency with which they are used (Cassidy & Shanahan, 1979). Reading menus and product labels are activities which most people do often, whereas completing an application form for a social security card is usually a one-time event. Cassidy and Shanahan (1979) also point out that these survival materials are more effective if they are relevant to the students' geographical area. Hometown

materials are more meaningful and motivating than commercially prepared exercises.

Cassidy and Shanahan (1979) emphasize that while most commercial programs and journal articles regarding functional materials concentrate on such forms and schedules just discussed, it should not be concluded that these are the only appropriate materials for survival instruction. If functional reading programs are meant to assist the student with meeting personal needs, the materials used in content area approaches to reading instruction also qualify as survival materials, and are appropriate to use in remedial reading programs. They recommend that survival reading materials should definitely be a component of secondary remedial reading curriculum, but caution that this instruction should not consume all of the class time. "Reading for enjoyment and recreation is also functional and should be encouraged" (Cassidy & Shanahan, 1979).

One resource not referred to in the article concerning functional reading was the newspaper. Although no articles were found specifically relating the newspaper to remedial reading instruction, Richie (1979) points out that, contrary to popular belief, the newspaper is written on a variety of levels and contains some parts that even the slowest and most reluctant readers will be able to master. She emphasizes the importance of teaching students how to read a newspaper discriminately and to recognize the role of

newspapers in society, since most adults get much of their "post school" education from them. Accepting this view, the newspaper could be categorized as a functional material.

Another advantage of using the newspaper with slow readers is the adult image it projects (Richie, 1979). Slow readers will not be ashamed to walk around with a newspaper under their arm, even if they are only able to work with the comics. Although Richie points out that a resourceful teacher can utilize every part of the newspaper, she believes the comics and cartoons are the most versatile parts. Therefore, if the comics and cartoons are all the student can handle, the newspaper is still a viable tool in the remedial classroom.

Koenke (1981) believes that in order to start students at a level in which they can be successful and with materials in which they are interested, comics can be beneficial. Comics are a useful first step for children who do not like to read or have a fear of failure. They can be the basis for direct instruction of some skills, rather than using less interesting sources.

Based on these ideas, and on the results of reading interest research of the past four decades which support the fact that children enjoy reading comics, Wright (1979a) investigated the use of the comic strip for the reluctant, remedial reader. He believes that traditional reading materials do not aid the teacher in making reading exciting

and that, possibly, comic strips could stimulate an interest in reading. Wright acknowledged that references to the easy reading level of comic strips are often made in the literature. However, he could find no readability studies to support these claims. Consequently, he conducted a study to determine the readability levels of twenty popular comic strips. His results indicate that the comic strips analyzed had average readability levels ranging from a 1.8 grade level to a 7.2 grade level. However, one-third of the comic strips had an average readability level below third grade and seven-tenths of the comics had a readability level below fourth grade. Wright contends that this data supports the viewpoint that comic strips provide easy reading material, thus making them a viable media for remedial instruction.

As mentioned earlier, readability levels may not be as important in selecting reading materials as other criteria. Swain (1979) surveyed 169 students to discover their preferences/interests in comic strips. The information she derived could be beneficial in helping teachers select comics for use in their classroom. Her study further determined that a large percentage of students do read comics, students perceive that they learn many things from reading comics, and that reading comics does not discourage them from reading books. In light of her findings, Swain supports the use of comics in the classroom, and lists

twenty activities for their use in teaching reading and language arts.

Wright (1979b) emphasizes that by no stretch of the imagination can comic strips/books be called great literature. They are graphic stories, written primarily for children and adolescents, which do contain all the elements of short stories: characters, dialogue, plot, conflict, and climax. "Obviously, comic books are not recommended because they are great literature. But a creative teacher who is engaged in direct instruction of children can use comic books as occasional instructional material" (Koenke, 1981).

The comic book is not new. According to Wright (1979b), it has been a part of American culture since 1933. Comics have endured because they have interested and excited child, adolescent, and adult alike. Scientists/technologists might cringe at the comparison, but the computer, especially the microcomputer, is a new resource on the educational scene which has the same potential--to interest and excite--child, adolescent, and adult.

Although computers have been a part of our daily lives for years, their role in the reading classroom is still largely not realized or understood, as well as not fully explored (Blanchard, 1980). Even so, an increasing number of teachers are making use of computers in reading clinics (Mason, 1983). Also, publishing companies already have

software programs on the market for micro-computers (Marsh, 1983), such as Radio Shack's High Motivating Reading Series, Instructional Communications' Reading Comprehension, and Edu-Ware's Compu-Read 3.0. According to Mason (1981b), a number of companies, both large and small are selling computer programs purported to be useful in remediating reading difficulties, and more will be marketed soon. Unfortunately, as viewed by Scheffman, Tobin, and Buchanan (1982), "much of the software available for micro-computers has been hastily written to be marketed quickly and is either boring, unimaginative, or educationally invalid" (p. 557).

In spite of the concern over the effectiveness of the available software, Mason (1983) is optimistic over the possible uses of the computer in the reading clinic or classroom. He believes that the computer can provide practice in reading, is motivational, is useful in diagnostic testing, and that additional uses will probably become apparent as more reading professionals begin to use computers. According to Rupley and Chevrette (1983), computer assisted reading instruction "holds the promise for becoming a powerful instructional tool that can increase students' engagement in reading" (p. 239). They believe that CAI can assist teachers in developing individualized reading programs to better meet the varied needs of students. Marsh (1983) agrees, but emphasizes that first,

there is a pressing need for the development of adequate software. Educators who are leaders in the reading field--educators who know what they need to teach--must cooperate and communicate with computer scientists and programmers and become involved in the development of commercial materials (Marsh, 1981; Scheffman, Tobin, & Buchanan, 1982).

It would appear, at this point, that a discussion regarding remedial reading materials is not complete. It is common knowledge that many other types of materials are currently in use in secondary remedial reading programs, such as specifically developed low level basal reading series, all types of audio-visual hardware with accompanying software, management systems, commercial kits and games, and specific skill sets. However, this review of current literature did not reveal any information regarding the use of any materials in secondary remedial reading classrooms other than the ones already discussed.

The search did reveal a few materials lists which could be beneficial in developing and implementing secondary remedial reading programs. Marcetti (1981) reviewed a wide range of print materials currently in use in secondary remedial reading programs. He provided information as to their cost, advantages and disadvantages of each, type of school district, instructional setting and grade level most suitable for each. Greenfield and Lessen (1979) developed a chart which gives the readability level of sixty-eight

reading series or supplementary reading materials from twenty-nine publishing companies. They hoped that the cross-referenced chart would help alleviate the problem of using more than one set of reading materials in the classroom. As a result of a survey of remedial reading experts, Koenke (1979) published a list of the most recommended professional books on remedial reading. Lists such as these could provide assistance to reading specialists. However, more important would be research which supports the effectiveness of the materials presented.

If postelementary remedial readers are to acquire the necessary skills to pass the minimum competencies set by state standards and acquire the literacy levels demanded by the public, more attention must be given to the approaches, techniques, and materials most appropriate and effective for instruction. Cowan (1977) reported that although there has been growth in secondary remedial reading programs, no real attempt has been made to assess the quality of these programs. Until more research is conducted and reported, local school districts are going to have to rely on the judgments and opinions of reading experts who have been active in the field as to the most appropriate instructional approaches, techniques, and materials for implementing effective postelementary remedial reading courses.

In-Service Procedures for Effective Reading Instruction

One drawback to the effectiveness of secondary remedial reading programs has been in staffing. Many of the courses are not taught by trained reading teachers (Hill, 1979; Manning & Manning, 1979). Duffy and Jacoby (1979) state that a popular response to the teaching of reading at the secondary level has been to..."let the English teachers do it." While English teachers know a great deal about the components of literature, they are not usually prepared to teach the technical skills of reading.

According to a survey (Mangieri & Kemper, 1979) which looked at certification requirements of all fifty states, most secondary teachers have never had a course in reading instruction. Texas is one of the states that does not require such a course. In order to improve reading instruction, school districts, for the most part, are going to have to rely on teachers already in the classroom (Mangieri & Kemper, 1979; Shanker, 1982). This is going to call for teacher training on a large scale. Just as the sixties and seventies were the decades of curriculum development, the eighties will be the decade of staff development (Wood & Thompson, 1980). New curriculum and instructional plans must be put into operation in our schools. "Therefore, the best way to help teachers in the eighties will be through in-service emphasis upon efficient

reading instructional practices and management techniques" (Powell, 1980, p. 5).

In fact, Smith, Otto, and Hansen (1978) believe that educators can take for granted that in-service education is a proper vehicle for responding to the need to improve reading achievement. However, reading in-service programs have been generally ineffective (Otto & Erickson, 1973; Rosenshine & Meyers, 1978; Perez, 1980; Powell, 1980). The challenge lies in offering worthwhile, productive in-service programs (Smith et al., 1980).

Texas Education Agency curriculum personnel have expressed a concern over how local school districts will be able to meet such a challenge and train teachers assigned to teach the newly mandated remedial reading classes (Anderson, 1983). This problem will be compounded if, as it appears at this time, certified reading teachers will not be required. There will probably be more of..."let the English teachers do it...requiring intensive training at the local level.

Such intensive training will be a tremendous undertaking for the local districts. According to an ERIC Research Information Brief (1980), there are literally thousands of very different programs for educators to choose from, ranging from traditional university courses to school-based workshops to overall school improvement programs. The literature on staff development (the terms staff development and in-service are used interchangeably

in the literature) does not provide much direction for decision makers responsible for in-service training (Cruickshank, Lorish, & Thompson, 1979; ERIC, 1980). Reviewing staff development literature, the ERIC brief states that the majority of publications were evaluation reports rather than real research. As most of these reports were written by administrators or teachers describing programs in their schools, they almost always concerned successful programs, since no one likes to publish failures. Cruickshank et al. (1979) comment--"Although we seem to write endlessly about inservice education, the writing almost exclusively is rhetorical and more ornamental than useful" (p. 27).

Other educators (Perez, 1980; Hutson, 1981; Robinson, 1981) substantiate the claim by Cruickshank et al. (1979) that we "write endlessly" about in-service training. Hutson (1981) calls the general education literature on in-service "vast." Robinson (1981) reports that the number of professional references on staff development or inservice training has "increased significantly." In 1977, Perez (1980) undertook an extensive ERIC search on every descriptor which had "in-service education" as part of its title. He discovered over 1000 sources. A recent Phi Kelta Kappa publication (PAR, 1983) reports that now, over 9,200 publications are listed in ERIC which deal with the topic of in-service. However, most of these publications are non-empirical and cannot serve as a data base from which

testable theory can be derived. The review of generic in-service literature for this study produced similar results--the number of articles dealing, in some fashion, with in-service training was "mind boggling" and of a very general or philosophical nature, with little empirical data. Therefore, the process for deciding which information to include in this study was extremely selective. As a result, this review focuses primarily on more recent research and reports which specifically relate to reading instruction and/or which could possibly assist in training postelementary reading teachers.

Actually, in spite of the abundance of generic in-service publications, information dealing specifically with the training of reading teachers is scarce. In 1973, the International Reading Association published a service bulletin, Inservice Education to Improve Reading Instruction (Otto & Erickson, 1973) as a part of it's Reading Aids Series. This was followed in 1982 with another bulletin in the series, Guidelines for Successful Reading Staff Development (Shanker, 1982). Although the titles imply specific techniques for reading teacher in-service, both bulletins are primarily based on a compilation of guidelines derived from generic in-service literature. Otto and Erickson (1973) do add a section on the responsibilities of a reading consultant and a few examples regarding specific aspects of reading.

Literature regarding in-service in relation to remedial reading instruction is almost non-existent. In light of the paucity of publications related to in-service training of reading teachers, especially remedial reading teachers, reading educators will have to look for the best practices as determined from the generic in-service literature. Although, as mentioned earlier, some educators believe that this body of literature is not beneficial, it does provide substantial agreement as to what some of the best practices and procedures are (Hutson, 1981).

There is probably near unanimous agreement upon the importance of involving teachers in planning their own programs (Hutson, 1981). Educators (Otto & Erickson, 1973; Cruiscuolo, 1979b; Perez, 1980; Jones & Hayes, 1980; Wood & Thompson, 1980; Monroe, 1981; Robinson, 1981; Shanker, 1981) who have reviewed in-service literature report that before staff development is planned, a thorough assessment of teacher needs is almost always recommended. According to Otto and Erickson (1973), by-passing this step in planning in-service is like building a house without providing a firm foundation.

The identification of significant needs is not a simple matter (Otto & Erickson, 1973) and the specific procedures to use in determining these needs should vary from one situation to another. Robinson (1981) believes that, unfortunately, the procedure most often used is to

have teachers complete a questionnaire listing a number of very general topics related to the field of reading education. The theory behind this procedure being that, once the questionnaires are tabulated, it will be a relatively easy decision as to the areas to be included in staff development. Robinson points out that the selection of topics with this consensus format often ignores individual differences among teachers. "It is ironic to note that the very people who are asked to meet the unique differences in their students through individualizing instruction are, themselves, frequently subjected to methods and procedures during the planning of a staff development program which defy these very tenets" (Robinson, 1981, p. 77).

Another drawback to this survey/questionnaire procedure is that many teachers have a difficult time with self-evaluation (Robinson, 1981; Jones & Hayes, 1980). The research reported by Jones and Hayes suggests that teachers can express symptoms of needs, but may not be aware of their actual needs. According to the experiences of Smith et al. (1978), "the real needs are often hidden behind a facade of apparent but trivial concerns" (p. 252).

Therefore, the needs assessment process must be comprehensive (Otto & Erickson, 1973; Robinson, 1981; Shanker, 1982), using a combination of procedures. Shanker (1982) suggests the following techniques: (1) suggestion box, (2) survey, (3) follow-up survey, (4) reports on

visitations to other schools, (5) conferences with a school team, (6) results of classroom observations by supervisors or other skilled observers, and (7) an examination of student achievement data. In other words, a needs assessment should be conducted through a variety of techniques, rather than depending entirely upon teacher self-evaluation.

Caldwell and Marshall (1982), in describing a teacher-centered approach to in-service, state that needs assessments can typically be conducted informally through staff conversations and interviews. Landrith (1980) also believes that conferences and discussions are important in assessing teacher needs. He points out that these needs can be effectively determined by self-evaluation, as long as the assistance of an evaluator is provided for discussing and assisting in reaching consensus.

Even though a variety of techniques for assessing teacher needs is recommended, Shanker (1982) agrees with Robinson (1981) that the most widespread approach is the questionnaire/survey. Caldwell and Marshall (1982), even though they prefer informal methods of identifying teacher needs, concede that the topical surveys may be used with a large target population. According to Shanker (1982), if surveys are going to be used, they should include: (1) a section on background information of the respondents, (2) choice of subjects of topics, with a method for rating according to importance and needs, and (3) preferences for

types of staff development activities and the times they might take place. The results from such surveys may be tabulated and considered along with other needs assessment information.

Robinson (1981) believes that in order to make reading in-service education relevant to the concerns of a specific group of teachers, a very accurate needs assessment must be completed using a school's current reading program for basic information. He points out that this information can be obtained from standardized reading tests results, as suggested by Shanker (1982), or by more informal sources, such as the opinions and feelings of the current teaching staff. While the standardized reading test results are important, Robinson contends that they are of limited value in making decisions about a reading program. On the other hand, he stresses that informal information, collected in an effective manner, can have a major effect on the eventual content of a staff development program.

Reviewing standardized reading test scores, as suggested by Robinson (1981) and Shanker (1982), indicates looking beyond the individual needs of teachers to individual needs of students and programs. This brings up a very important aspect of a needs assessment, according to Lemon and Minier (1981). They point out that within a local school district there are a myriad of individual and group needs to be considered, addressed, and met. Even

though the literature has emphasized the importance of teacher needs, individual staff needs should not consistently supercede the entire school district's needs, nor should the reverse be true. Lemon and Minier emphasize that there must be a blending and sharing of needs and goals at all times, meeting both individual needs and institutional needs, in order to have a productive organization.

One of the six critical guidelines for successful reading staff development, according to Shanker (1982), and which must be dealt with before the needs assessment process, is to identify an individual to be responsible for in-service organization and management. Shanker points out that this guideline is often over-looked, presumably based on the assumption that the appointment of a leader will automatically occur. This is not always the case, and Otto and Erickson (1973) emphasize that leadership is essential in order to identify needs and make plans to meet these identified needs.

Once the needs assessment has been completed on a reading program, the appointed leader or leadership/planning team must organize the information by listing and categorizing to identify similar topics or needs (Shanker, 1981). Care must be taken to balance the needs perceived by teachers and the needs perceived by administrators. According to Shanker, after these tabulations have been made, the staff development leader must prepare a written

report, summarizing the needs assessment data and describing the preliminary plans for staff development. This report should be circulated to all affected staff members. While pointing out that there is nothing inherently wrong in this approach, Robinson (1981) believes it should be taken a step further. Rather than just circulating the written results, he believes teachers should have the opportunity to interact and discuss with each other what they see as being important implications for their own staff development program. Such discussion, after reviewing the written report, could become the most vital ingredient in planning a staff development program in reading.

The tabulated results of a needs assessment gives direction to the formulation of a goal or goals for the in-service program (Otto & Erickson, 1973; Shanker, 1982). Specific objectives will then need to be developed to guide the activities that will lead to the attainment of the established goal/goals. By now, it is common knowledge among educators that objectives should be stated in behavioral or performance terms. In other words, the objectives are stated in terms that describe what a participant should be able to do upon the completion of a program. It is not within the scope of this study to review the body of literature dealing with behavioral objectives. However, for further discussion, Preparing

Instructional Objectives (Mager, 1962) has become the classic "how-to-do-it."

A recent Phi Delta Kappa newsletter (PAR, 1983) emphasized that in-service education is only effective if it accomplished its goals. Therefore, the goals should dictate the form--length of time, materials, presentor, setting. In a survey assessing teachers' preferences for in-service education (Zirkel & Albert, 1979), the highest priority was given to the content of in-service offerings. The literature review for this study did not reveal any publications dealing with specific content for reading in-service. Presumably, this is due to the assumption that the content or topics for a particular in-service program should be individualized and would develop from a needs assessment procedure.

The second priority in the Zirkel and Albert (1979) teacher preference rating was given to the time at which training would be offered. In this particular study, respondents preferred the training to be held during or directly after school. During school vacation, before school, and weekends were considered negative training times. Other educators (Otto & Erickson, 1973; Smith et al., 1978; Criscuolo, 1979b; Burrello & Orbaugh, 1982) support scheduling training sessions during participants' normal working hours. Smith et al. (1978) emphasize strongly that no matter what the resource constraints of a

local district are, in-service plans should include the provision of released time and/or paid (or contracted) supplementary time for participation in the in-service activities. Criscuolo (1979b) also emphasizes that released time should be an integral part of the in-service plan.

Another time or scheduling concern is when, during the year, should training be given. Although the Zirkel-Albert survey (1979) did not address this issue, Smith et al. (1978) report that many schools present otherwise well-planned in-service programs "slap-dashed" into the day or two before school starts. At this time, most teachers are more concerned with getting their rooms and their thoughts ready for the arrival of their children. Other school districts provide a number of days throughout the school year.

The next, or third priority in the teachers' in-service preference scale is referred to by Zirkel and Albert (1979) as a group of intermediate incentives for teachers, which includes format, credit, and money. Regarding format for training, these particular teachers gave preferential rating to demonstration and clinical practice, which, from the viewpoint of Zirkel and Albert, reflect a proclivity for the "practical." In-service education can come in many forms--self-study using programmed packages, group meetings, retreats, traditional classes; but, in order to be effective, must be appropriate for meeting the goal for which it is intended (PAR, 1983). Burrello and

Orbaugh (1982) and the ERIC report (1980) also support the "practical" when considering format. From the viewpoint of Burrello and Orbaugh, on-site demonstrations with students should be included when appropriate to the experience. The ERIC report concluded that in-service should provide opportunities to observe other teachers who have mastered and are practicing the skills being taught.

As to the other intermediate incentives--credit and money--the teachers in the Zirkel-Albert study (1979) regarded all credit as positive, especially school board and university credit. In regards to money, the teachers gave a very high rating to the prospect of no tuition charges. The waiving of a registration fee and the payment of a summer stipend were rated as positive, but less essential. The ERIC report (1980) concluded that paying teachers to participate in programs appeared to be less useful than providing programs that appealed to their motivation to improve their abilities and become better teachers.

The fourth, or lowest, rated priority in the Zirkel-Albert study (1979) was the place or location of training. These teachers did express a preference for on-site training, although not to the exclusion of traveling to the university campus. A number of other surveys (Dillon, 1979), however, gave a negative view of institutions of higher learning offering in-service. These surveys revealed that in-service that occurs closest to the classroom

is seen as most helpful and is best accepted. Burrello and Orbaugh (1982) also support the school site as the focus of in-service education activities and the ERIC report (1980) found that programs are more successful at changing attitude if they occur at school, rather than elsewhere.

Although not an issue in the Zirkel-Albert study (1979), an aspect of in-service which the Phi Delta Kappa newsletter (PAR, 1983) considers to be very important if goals are to be achieved is the presenter. The ERIC report states that the findings concerning who should be the trainers in staff development activities are more ambiguous than in any other area of staff development. Patton and Anglin (1982) conducted a series of in-service activities that focused on the needs of teachers in a mid-sized high school in an attempt to identify the factors that contributed to success. They concluded that the most significant factor in determining the degree of success of an in-service activity was the level of confidence the teachers had in the in-service staff. Characteristics of a presenter who was able to establish a positive confidence level included: "(1) the ability to draw examples from one's own teaching experiences; (2) the ability to talk 'with,' not 'down,' to teachers; and (3) the ability to display empathy toward the complexity of high school teaching situations" (p. 167).

Nichols (1979) addressed the importance of program

presentors in describing a comprehensive district-wide program of teacher in-service which he had developed to improve a district's performance in basic skills, especially reading. For one-half of a two-day workshop, he used teachers from within the district for sharing sessions. Nichols based this strategy on the belief that some teachers have a store of teaching techniques, they are aware of their district's own needs and can therefore customize a presentation, and they are available for follow-up activities. However, he believes that in order to have a well-balanced in-service program, outside consultants should also be used. Burrello and Orbaugh (1982) support this belief in sometimes using outside consultants, stating that outside agencies or consultants may be helpful in supportive roles. They can be especially helpful as catalysts during a "start-up" time or as process helpers during times of crisis.

Christensen and Burke (1982) conducted a study to determine and compare preferred modes of in-service of teachers and the modes principals perceived their teachers would select. Both principals and teachers from the ninety-eight schools included in the study agreed that college and university personnel were the best choice to deliver in-service programs to help teachers identify reading abilities. For filling other needs, principals perceived that teachers would prefer teacher-led

workshops. However, the teachers in the study showed a preference for in-service workshops led by nonteaching personnel in the district.

Williamson and Elfman (1982) support the use of teachers or local district office staff for conducting in-service training. From their viewpoint, consultants or teachers from within a district have a vested interest in the educational program and are more likely to provide practical assistance. And, if the need arises, they are available for even additional assistance. Williamson and Elfman consider even more important the fact that consultants from within the district are likely to take their task more seriously, since they are in regular contact with the faculty and students.

If there are no staff members within a district to conduct in-service, Williamson and Elfman (1982) concede that an outside consultant must be hired. However, they offer some "precautions:" (1) canvass colleagues in other schools to determine the best possible consultant; (2) interview a couple of possible consultants to determine who would best fill the district's needs; and (3) work out financial and time limitations with the consultant first.

Although Williamson and Elfman (1982) cast a rather dim view on using outside consultants, Landrith (1980) points out that colleges and universities are able to provide services and expertise unobtainable from any other

source. They can provide assistance in researching various kinds of in-service programs which a school district would like to offer, and they can teach courses awarding college credit or continuing education units in a variety of areas. Another area where colleges can be instrumental is providing assistance in needs assessment. They can aid in developing instruments suitable for assessing individual and group needs, as well as developing activities to improve competencies. According to Landrith, school districts and colleges should be partners in providing in-service education, planning together for effective training.

Up to this point, the discussion regarding in-service has focused on general aspects which need to be taken into consideration by a school district's administration in planning their in-service programs. Now it is time to change the focus and look at the teacher as a learner. Brandt (1982a), in an overview for a recent Educational Leadership issue, states that although staff development may have other purposes, much of it should focus squarely on skill development. In-service training should assist teachers in becoming more capable and flexibly professionals, and it should lead to classroom application.

In order to determine the ability of teachers to acquire teaching skills and strategies and meet these goals of in-service, Joyce and Showers (1980) analyzed more than 200 studies in which researchers investigated the

effectiveness of various kinds of training methods. From this analysis, they bring three general messages: (1) teachers are wonderful learners, (2) in order to improve the skills and learn new approaches to teaching, teachers need certain conditions that are not common in most in-service settings, even when teachers participate in the governance of those settings, and (3) the research base reveals what conditions help teachers to learn.

According to Joyce and Showers (1980), there are two purposes of teacher training. One is improving teaching skills by "fine tuning" present skills. The other is learning new ways of teaching. In training toward "fine tuning," teachers work on their craft, and are likely to increase their effectiveness. Mastering new teaching strategies or models and/or learning to put alternative curriculum in place is an entirely different goal. In order to accomplish this goal, teachers must explore and understand the rationale behind the strategy or curriculum, develop the ability to carry it out, and master fresh, new content. Mastery of new techniques requires more intensive training than does the "fine tuning."

Joyce and Showers (1980) organized the data from their study in order to find out how various components of training contribute to these kinds of learning. To do this they developed a typology of "levels of impact" of training and another for categorizing training components. As they

analyzed the research on training, they attempted to determine how much each training component contributes to each level of impact.

The levels of impact identified for their study (Joyce & Showers, 1980) were: (1) awareness, (2) the acquisition of concepts or organized knowledge, (3) the learning of principles and skills, and (4) the ability to apply those principles and skills in problem solving activities. Joyce and Showers contend that no matter how or from whom a person learns, the outcome of training can be classified into one of these levels of impact. Only after the fourth level has been reached can an impact on the education of children be expected.

The components of teacher training identified for the Joyce and Showers study (1980) were:

1. Presentation of theory or description of skill or strategy;
2. Modeling or demonstration of skills or models of teaching;
3. Practice in simulated and classroom settings;
4. Structured and open-ended feedback (provision of information about performance);
5. Coaching for application (hands-on in-classroom assistance with the transfer of skills and strategies to the classroom (p. 380).

After analyzing the 200 training studies, they reached the conclusion that the inclusion of several and perhaps all of the training components are necessary for maximum effectiveness. If the focus of the training is "fine tuning,"

modeling, practice under simulated conditions, and practice in the classroom, combined with feedback, will probably result in considerable changes. If mastery of a new approach is the desired outcome, presentations and discussions of theory plus coaching to application are also necessary. Joyce and Showers' (1980) final conclusion was that the level of application and problem solving would be more readily achieved if all five identified components of teacher training were included, especially coaching.

Elaborating further on coaching, Joyce and Showers (1982) compare teachers to athletes, claiming that teachers will put newly learned skills to use--if they are coached in how to do so. They do caution that strong training sessions are imperative, where teachers do acquire new skills and knowledge. Then, to transfer this new knowledge to the classroom, teachers need to be "coached," either by each other or by administrators, curriculum supervisors, or college professors. Logistically, they believe that teachers are closer to one another and in excellent position to carry out most of the coaching functions.

In a recent Educational Leadership issue, Brandt (1982b) reports on an interview with David Berliner, in which Berliner substantiates what Joyce and Showers refer to as coaching. In his investigations of teacher effectiveness, he found that trying to disseminate knowledge by simply making presentations had very little impact. When

he actually went into the classroom and worked with teachers, changes were made in teacher behavior. Berliner emphasized that in order to help a teacher apply new skills or training in the classroom, the supervisor or "coach" must have an understanding of what the teacher is trying to accomplish, monitor the instruction, and then help the teacher look at the effects.

Until recently, there have been few comprehensive models that offer a systematic approach to designing staff development (Wood, McQuarrie, Jr., & Thompson, 1981). As mentioned earlier, there also has been little empirical data on which to develop effective programs. Current research, such as the work of Joyce and Showers (1980, 1982), is beginning to have an impact on staff development/in-service practices. Educators are using the results of this new research, along with the principles of adult learning styles, teacher effectiveness, and clinical supervision, to design models for in-service education. This trend in the literature seems to substantiate the opinion of Wood and Thompson (1980) that the eighties will be the decade of staff development.

A review of new models for in-service education indicates that they are mostly generic in nature. No models were found that dealt specifically with training for reading teachers, or, for that matter, any other subject area teacher. The lack of such specific models is probably

based on the assumption that what is effective for training teachers in one area is just as effective for training teachers in another area. Area specialists, for now, will have to look to the generic models for guidance. Since these models are new, not related to reading instruction, and, for the most part, offer no empirical data to support them, to report on them in depth would not seem to be within the realm of this review. However, a brief overview will be given of several models in order to give the reader an awareness of this new trend in in-service education.

Staff development trainers in Adams County, Colorado, developed a model (Wilsey & Killian, 1982) based on three elements:

1. Adult learning theory: Knowledge of how adults learn and ability to apply knowledge to instructional design.
2. Aspects of effective instruction: Knowledge of effective aspects of instruction and ability to apply them in ways to meet the adult learner's needs.
3. Clinical supervision: Knowledge of clinical supervision and ability to conduct instructional conferences appropriate to the stages of learner development (p. 36).

In their model, these three elements interact to form a framework for matching adult learning characteristics with appropriate teaching techniques and supportive follow-up. Wilsey and Killian point out that this concept of matching is critical to creating flexible arrangements that best meet participants' needs.

Developers of the RPTIM Model (Wood, Thompson, &

Russell, 1981) claim that it is research based, yet go on to relate that it is based on ten basic beliefs or assumptions regarding in-service training. Out of these assumptions grew the five stages of their model: Readiness, Planning, Training, Implementation, and Maintenance--thus, the acronym RPTIM. Each one of these stages is defined by a set of practices which identify specific tasks that are to be completed in that stage, along with the personnel responsible. The developers of the model did conduct a nationwide survey in order to determine how often these practices should be used in designing in-service programs and if the respondents supported the ten assumptions upon which the RPTIM was based. The results of the survey, which was sent to the membership of the Council of Professors of Instructional Supervision (COPIS) and the National Staff Development Council (NSDC), indicated strong support, both for the practices and the assumptions.

The Basic Skills Instruction for Secondary Schools Model (Mohlman, Kierstead, & Gundlach, 1982) was developed for the California Department of Education to meet the complex needs of secondary teachers. The format of this model is to present a series of small group workshops, based on findings from research that deals with teacher effectiveness. The training topics and the sequence of presentations are:

- (1) time on task, (2) behavior management/discipline,
- (3) classroom management: organization/grouping,

(4) instructional sequence/lesson design, (5) teacher expectations/differential treatment of students, and (6) program quality: effect on students. The research of Joyce and Showers (1980), previously discussed, guided the design of the workshops. Spread over a five month time span, the workshops included presentation, demonstration, and some practice and feedback. Practice, feedback, and coaching occur in the context of peer observation between the workshops. The developers of this model stress that the purpose is not to tell teachers how to teach, but to provide them with major concepts and tools so they can analyze their own teaching in light of the research findings. Although the report provides no empirical data, Mohlman et al. report favorable results with the implementation of the model in California.

Although only three models for in-service design have been presented here, and rather succinctly, they present a fairly accurate picture of how this trend is progressing. Basically, since models seem to be the "in thing," many educators are "jumping on the bandwagon," so to speak, and developing in-service/staff development models. Some seem to be based on sound research, some claim to be based on research, without evidence, and some are merely plans for a program presentation which have been labeled "model." Some are highly theoretical and appear to be difficult to implement, while the ones which appear to be "presentable" have

no data to support their effectiveness. If the decade of the eighties is truly going to be the decade of staff development, then it is time for educators to sort through the myriad of models, assumptions, practices, and develop practical, workable designs which school districts can implement for effective in-service training.

Last, but certainly not the least important, in the in-service process is to evaluate results (Otto & Erickson, 1973; Shanker, 1982). Vacca (1983) compares in-service evaluation to listening. Listening is commonly considered to be the most neglected language art. She points out that evaluation is the most neglected component of in-service education. According to Vacca, when evaluation is included in the in-service process, it tends to be one-dimensional.

The review of the literature for this study seems to support Vacca's (1983) belief that evaluation is the neglected component of the in-service process. Publications related just to in-service evaluation are almost nonexistent. In other articles describing programs or models of training, evaluation is always included, but seldom elaborated upon. In fact, the importance of evaluation is stressed, but rarely are concrete methods or processes of how to evaluate provided. For example, in Otto and Erickson's (1973) bulletin, they state that in-service evaluation can be done in a number of ways. The most naturalistic is observation of outcomes, the most objective is paper and

pencil testing. They point out that work samples and performance tests may also be used. That is the extent of their "how-to." Shanker's (1982) more recent bulletin merely states that each in-service session should be evaluated immediately after it occurs, usually a brief written evaluation conducted by the curriculum leader. That is all! The ERIC brief (1980) referred to earlier, which reviewed the research on staff development, did not address the issue of evaluation. One publication (Rallis & Bucci, 1981) stresses the need for alternative methods of evaluating in-service, offering a list of questions that need to be answered. Yet, no guidelines are given on how to derive the answers.

If evaluation is to be a worthwhile part of in-service, it needs upgrading (Vacca, 1983). Procedures for multi-dimensional evaluation need to be designed and implemented. Vacca emphasizes that careful planning must be done in order to have evaluations that are useful, effective, and built on real concerns. She believes that in-service programs in reading limit evaluation to one major outcome, such as the students' reading achievement scores. This is a product-orientation form. Less frequently, measures are given to assess the participants' reaction to the ideas presented during the in-service. This is a process-orientation. The third type of evaluation is personnel-oriented, in which attention is paid to the way in-service

leaders/speakers deliver those ideas. Vacca presented samples of the three different approaches and strongly recommends building a multi-dimensional evaluation component into every in-service program. If in-service programs are meant to upset the status quo, to cause teachers to begin to think differently about learning, and to change some of what is happening in the classroom, research will need to provide more effective evaluation procedures for practitioners.

Zirkel and Albert's (1979) observations seem to adequately summarize the current status of inservice: "The literature reveals a dramatic increase in the attention to in-service teacher education, but a notable lag in the empirical efforts to plan such programs" (p. 332). Criscuolo (1979b) emphasizes that it is essential to examine and use concrete results and promising instructional strategies in shaping effective reading programs in the secondary schools. In order to be successful in the implementation of the new remedial reading curriculum, local school districts in the state of Texas will need to be made aware of such concrete results and promising instructional strategies. Due to the paucity of research-based data on which to build in-service programs, they will need to look to educators in the field for guidance. The combined input from school, university, and service center reading specialists who have been active in providing such training could

be extremely beneficial to local districts as they begin to plan their in-service programs for their secondary remedial reading teachers.

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CHAPTER III

METHODS AND PROCEDURES

Selection of Subjects

The subjects of this study were limited to Texas reading specialists. Superintendents of school districts, executive directors of service centers, and program directors of colleges and universities offering advanced degrees in reading were asked to select staff members for the study on the basis of their experience and expertise. These selected reading specialists were asked to participate as panelists for the study.

The Population

The population for this study included the following:

1. reading specialists from colleges and universities in the state of Texas which offer graduate programs in reading instruction,
2. reading specialists from the twenty Regional Education Service Centers in Texas, and
3. reading specialists from public and accredited non-public school systems in the state of Texas.

The Sample

Executive directors of Texas' Regional Education Service Centers, program directors of the state's colleges

and universities that offer graduate programs in reading, and superintendents of the largest Texas public and accredited non-public school systems were asked (see Appendix B) to select qualified reading specialists to participate in the study. Criteria for college and university participants was an advanced degree in reading with a special interest in diagnostic and remedial reading. Other participants were required to have either an advanced degree in reading, an All-level or Secondary Reading Certification, or at least twelve to fifteen hours of advanced reading with a special interest in diagnostic and remedial reading. It was reasonable to expect college and university program directors, service center directors, and superintendents to select participants who met the criteria and who were therefore in a position to give subjective recommendations regarding the development and implementation of postelementary remedial reading instruction.

The twenty Regional Service Center executive directors, as listed in the Texas School Directory (TEA, 1982), were asked to select one reading specialist from their staff to participate in the study. Colleges and universities were selected according to the International Reading Association publication, Graduate Programs and Faculty in Reading (Blomenberg, 1981). Program directors of the fifteen Texas institutions listed, excluding the ones used in the pilot study, were asked to select one, two, or three faculty

members to participate, depending upon the size of the staff. Directors of the two universities with fifteen or more staff members were asked to select three participants; the director of the one university with ten staff members was asked to select two participants; and the remaining directors, all in colleges and universities with less than ten staff members, were asked to select one participant. This provided a total to twenty requests, equal to the number of requests from the Regional Education Service Centers.

Public and accredited non-public schools were selected on the basis of their average daily attendance (ADA), according to the Texas School Directory (TEA, 1982). The fifty public schools with ADAs of over 10,000, excluding the ones used in the pilot study, and the seven accredited non-public schools with ADAs of over 3,000 were selected for the study. Superintendents, or their delegates, were asked to select one, two, or three reading specialists to participate in the study, depending upon the size of the district. Superintendents of the four public school districts with an ADA of over 60,000 were asked to select three participants; superintendents of the two districts with ADAs between 40,000 and 60,000 were asked to select two participants; and the superintendents of the remaining districts were asked to select one participant, for a total of sixty requests. Superintendents of the three largest accredited

non-public school systems were asked to select two participants, the remaining ones to select one participant, for a total of ten requests. Participants from public and accredited non-public school systems could be directors, coordinators, consultants, supervisors, or secondary teachers of reading.

This procedure provided a total of 110 potential panel members for the Delphi. According to Kerlinger (1964), returns to mail questionnaires of less than 40-50 percent are common and the researcher must be satisfied with 50-60 percent. With this in mind, along with allowing for attrition after the first or second rounds, a panel of sixty after the first round was considered acceptable and a panel of fifty after the final round was acceptable. This meets with the recommendations of McLaughlin (1979) of fifty members for a Delphi study in order to easily manage the re-iteration process.

Methodology: The Delphi Method

The Delphi technique was used in this study. It is a method of structuring a group communication process to elicit and evaluate opinions and judgements, provide feedback for re-evaluation, and determine consensus among the group members (Linstone & Turoff, 1975). Delphi makes it possible to obtain many of the advantages of groups while eliminating most of the disadvantages (Martino, 1972; Morgan & Griffin,

1981). Proponents of Delphi attribute this to the following three factors which distinguish it from the usual methods of group interaction (Martino, 1972; Sackman, 1974; Linstone & Turoff, 1975,): (1) anonymity, (2) iteration with controlled feedback, and (3) statistical group response.

According to Martino (1975), anonymity is achieved by handling the group interaction through a series of questionnaires, avoiding the possibility of identifying a specific opinion with a particular person. Ideas can be considered on their own merit, reducing the effects of dominate individuals. Iteration with controlled feedback refers to the aspect of Delphi whereby the results from each step are summarized and given back to the participants. This prevents the group from taking on its own goals and objectives and helps them in concentrating on the subject at hand. The statistical group response in a Delphi study includes the opinions of the entire group.

Dalkey (1975) explains that the statistics usually include a measure of central tendency (mean or median), a measure of dispersion (interquartile range), and the location of an individual's response in relation to the responses of the entire group. Delphi allows only the interactions to occur that are likely to improve the quality of decisions. This eliminates the effects of dominant individuals, irrelevant input by group members, and the "bandwagon"

effect which can unduly influence group opinions (Martino, 1972; Morgan & Griffin, 1981).

Delphi methodology is carried out by interrogating a panel of experts with a series of questionnaires, usually referred to as rounds. The first round is unstructured and open-ended, with the purpose of eliciting initial ideas and recommendations. In round two, the participants are presented with a rating instrument, based on the information received from round one. In succeeding rounds, the participants are presented with the same instrument as in round two with the added statistical group responses. They are asked to review the feedback and responses again, in an attempt to reach consensus (Martino, 1972). Martino and Sackman (1974) both point out that although the Delphi sequence can be carried out to four or five rounds, it can be terminated after round two if near agreement is reached. In most cases, three rounds are sufficient to attain stability in responses, further rounds showing little change (Linstone & Turoff, 1975).

The number of participants in a Delphi study can vary. According to Turoff (1975), a specific type of Delphi which acts as a precursor to committee activity can have from ten to fifty panel members. Conventional Delphi, as described by Linstone and Turoff (1975), usually uses a larger panel. The information derived from a panel that is too large could prove unwieldy, and a panel that is too small might not

provide enough information. Therefore, McLaughlin (1979) recommends that the number of panelists be greater than twenty-five but less than one hundred. He further recommends a total of fifty panelists in order to easily manage the re-iteration process.

The Delphi technique was originally developed at the Rand Corporation in the late 1940s as a systematic method for soliciting expert opinion, especially technological forecasting (Sackman, 1974; Parker & Taylor, 1980). Since then the technique has been broadened and used by many organizations as a communication tool for policy questions. Linstone and Turoff (1975) emphasize that the purposes of Delphi are as varied as its users, pointing out studies in the fields of government, business, industry, healthcare and medicine, and education. It has been used to validate teaching competencies, analyze career education content, and to clarify education objectives (Parker & Taylor, 1980), to develop national drug abuse policy (Jillson, 1975), to determine factors which relate to decisions of women who seek positions in educational administration (Sloan, 1979), and to determine the factors that contribute to success in administering AA high schools in Texas (Abungu, 1975).

This study used a modified Delphi method with three rounds of questioning. The first questionnaire (see Appendix E) was open-ended, designed to elicit perceptions of

the panelists upon which the ensuing questionnaire could be based. This technique provided a wide range of responses which panelists perceived to be relevant to the investigation, while reducing experimenter bias.

The second questionnaire (see Appendix G) consisted of recommendations developed from the combined responses received on Questionnaire I. A five-point rating scale indicating degrees of effectiveness was provided for each of the recommendations. In round two, the panelists were asked to rate each recommendation according to their perceptions of its effectiveness.

The questionnaire for round three (see Appendix J) included the same recommendations as Questionnaire II, along with the added statistical group responses (median and interquartile range) for each recommendation. Also, each panelist was provided with a record of his/her responses from the second questionnaire. In the third round, the panelists were asked to review their previous responses in relation to the group responses and make any desired revisions in their ratings.

The results of the third questionnaire were recalculated, determining the revised medians and interquartile ranges for the total group and for each of the three subgroups participating in the study: college and university reading specialists, service center reading specialists, and school reading specialists. The recommendations with

the highest median values represented those perceived by the panelists as being the most effective. The recommendations with the lowest interquartile ranges represented the recommendations with the highest degrees of consensus among the panelists.

The purpose of the first round of the Delphi was to elicit a wide range of recommendations perceived to be effective. The purposes of the second and third rounds were to determine the degrees of effectiveness of these recommendations and the degrees of consensus of the panelists.

Pilot Study

A small scale pilot study was conducted in May, 1983 in order to determine the validity of Questionnaire I and the procedures which were to initiate the Delphi. Letters (see Appendix B) were sent to twelve public school districts and two colleges, along with the materials necessary to initiate the study (see Appendices A, C, D, E). Questionnaires were received from seven subjects, 50 percent of the initial mailing. According to Kerlinger (1964), returns to mail questionnaires of less than 40-50 percent are common and the researcher must be satisfied with 50-60 percent.

A major disadvantage of this pilot study was the time of year it was conducted. Colleges and universities were completing the spring term and public schools were

preparing for the close of the school year. Educators were not in a frame of mind to become involved in research projects. In fact, several return postcards and follow-up telephone calls substantiated this belief. They indicated that during the final weeks of a semester, it was difficult to undertake a new project, suggesting that September should be more conducive to initiating the study, especially with the public hearings concerning House Bill 246 scheduled for the summer and the publicity they would elicit.

The subjects selected by the institutions were well qualified to participate in the study. Four had master's degrees in reading, four had all-level reading certification, one had a doctorate in reading, one had a doctorate in elementary education with twenty-seven hours in reading, one was a doctoral candidate in reading with fifty hours of reading courses, one was a doctoral candidate in administration with over fifteen hours in reading courses, and one was a master's candidate for a degree in reading. Their professional positions included a secondary reading teacher, a lead teacher for secondary reading, a doctoral assistant, a curriculum coordinator, a director of reading, and a language arts coordinator. These qualifications indicated that the procedures for subject selection were appropriate. The only modification in this present study was to emphasize to college and university directors that a faculty member was preferred, rather than a doctoral assistant.

The information elicited on the pilot questionnaire was valid, pertinent, and sufficient to design a rating instrument. A few minor modifications were made on Questionnaire I for the purposes of this study. Regarding instructional materials, a further direction was added requesting participants to be more specific, listing both product and publisher when possible. As the majority of respondents dealt with topics they deemed necessary for teacher in-service, a further direction was added to the present study, requesting panelists to suggest effective methods for presentation (time, place, duration, presentor, etc.) as well as topics.

Specific Procedures for Collection of the Data

Round One

The purpose of the study and the Delphi method were explained by letter (see Appendix B) to the program directors of the colleges and universities, the executive directors of the Regional Education Service Centers, and the superintendents of the school districts included in the study in mid-September, 1983. The following materials needed to initiate the Delphi accompanied these introductory letters:

1. introductory letters for the prospective panel members explaining the study and the Delphi method (see Appendix C),

2. information forms to be completed by the panel members (see Appendix D),
3. Questionnaire I (see Appendix E),
4. essential elements and descriptors for the proposed seventh and eighth grade reading courses (see Appendix A), and
5. return postcards and envelopes.

Executive directors of the Regional Education Service Centers were asked to select one staff member to participate as a panelist; program directors of the colleges and universities were asked to select one, two, or three reading professors to participate, depending upon the size of the staff; and superintendents were asked to select one, two, or three reading specialists to participate, depending upon the size of the school district (ADA). They were asked to distribute the initial materials accordingly and to complete the postcard with information identifying the selected participants.

The letter to selected reading specialists explained the study and the Delphi method, and requested their participation in the study. The information form was designed to determine if the selected participants did meet the criteria established for panelists as well as to provide accurate information for further communication. When at least sixty reading specialists had agreed to participate in the study by completing and returning

Questionnaire I by mid-October, 1983, the panel was considered complete.

Questionnaire I (see Appendix E) was an open-ended form which requested that the panelists recommend instructional approaches, teaching techniques and materials, and in-service procedures they deemed effective for developing and implementing postelementary remedial reading programs. They were asked to list as many recommendations as they felt had any significance and to comment on or substantiate their recommendations, if desired.

In early October, superintendents and directors who had not responded were contacted by telephone and asked to select a staff member to participate in the study. Also, selected panelists who had not returned the questionnaire were contacted by telephone. The panel was considered complete in mid-October, 1983 when sixty-two panelists had returned Questionnaire I, indicating their agreement to participate in the study. Of the sixty-two panelists, eight were university or college reading specialists, thirteen were Regional Education Service Center reading specialists, and forty-one were school reading specialists, all meeting the criteria established for the study. The return rate for round one was 56 percent, which was in line with Kerlinger's (1964) observations regarding mail surveys.

Round Two

Questionnaire II (see Appendix G) consisted of 104 recommendations constructed from information derived from Questionnaire I. All responses were compiled, refined, and ordered according to the frequency with which they were recommended. Using a five-point scale, the panelists were asked to rate each recommendation according to their opinion of its effectiveness for seventh and eighth grade remedial reading instruction and/or teacher in-service.

Questionnaire II was sent to each of the sixty-two panelists in early November, 1983, along with a letter of explanation (see Appendix F) and a return envelope. In mid-November, 1983, follow-up letters (see Appendix H) were sent to panelists who had not returned Questionnaire II. Round two was considered complete when fifty-seven panelists had returned Questionnaire II, for a return rate of 91.9 percent.

Round Three

Questionnaire III (see Appendix J), constructed from Questionnaire II, consisted of the identical recommendations, with the addition of the results from Questionnaire II. It provided the panelists with the group median (measure of effectiveness) and interquartile range (measure of consensus) for each recommendation. Each panelist's responses from Questionnaire II were recorded on his/her

Questionnaire III. Panelists were asked to complete Questionnaire III as they considered the group statistics and reviewed their own responses to each of the recommendations on Questionnaire II. They could change their original response at this point, or they could rate each of the recommendations the same as on Questionnaire II. The only additional information requested on Questionnaire III was for the panelists to check if they had used or observed the use of each recommendation.

A letter (see Appendix I) explaining the group statistics and directions for completing Questionnaire III and Questionnaire III, with a return envelope, were sent to the panelists in early December, 1983. In mid-December, follow-up letters (see Appendix K) were sent to panelists who had not returned Questionnaire III. A final response to Questionnaire III by at least fifty panelists was considered acceptable.

Fifty-four panelists returned Questionnaire II for a return rate of 94.7 percent and the data collection process was complete. Of the fifty-four panelists, seven were university or college reading specialists, eleven were service center reading specialists, and thirty-six were school reading specialists.

Procedures for Analysis of the Data

The process for the analysis of the data had three stages.

Stage One

The responses derived from Questionnaire I were analyzed, combined, reworded, and converted into statements or recommendations regarding instructional approaches, teaching techniques and materials, and in-service topics and procedures. On Sunday, October 24, 1983, a committee of five reading experts with earned doctorates (see Appendix L) reviewed the responses from Questionnaire I and the statements or recommendations which had been constructed from those responses. They revised the recommendations by rewording, combining or separating, when necessary, both for clarity and to better represent the perceptions of the panelists. The committee categorized the recommendations according to the four categories of Questionnaire I and further recommended that the statements be ordered according to the frequency of mention under each category.

Stage Two

The responses derived from Questionnaire II were treated by computer to determine the median and the interquartile range for each recommendation. Ferguson (1976) defines the median as a point on a scale such that half the observations fall above it and half below it. He

presents the following formula for calculating the median:

$$\text{Median} = L + \frac{N/2 - F}{f_m} h$$

"where L = exact lower limits of interval containing the median

F = sum of all frequencies below L

f_m = frequency of interval containing median

N = number of cases

h = class interval" (p. 53).

The higher the median for each recommendation, the greater the degree of effectiveness as judged by the panelists. The median, rather than the mean, was used in this study for the measure of central tendency as it is influenced less by extreme scores (Roscoe, 1975).

The interquartile range was used as the measure of consensus. Roscoe (1975) defines the interquartile range as "the interval $Q_3 - Q_1$, which constitutes half the scores in the distribution" (p. 65). The smaller the interquartile range for each recommendation, the greater the consensus of the panelists regarding the effectiveness of the recommendation.

Stage Three

The responses from Questionnaire III were treated by computer to determine the revised median and interquartile

range for each recommendation. The recommendations were then ranked according to median scores of the total group. Also, medians and interquartile ranges were calculated for each of the three sub-groups: college and university reading specialists, service center reading specialists, and school reading specialists. The median test, a nonparametric test to determine whether significant differences exist between two or more groups (Roscoe, 1975; Ferguson, 1976) was then used in order to determine whether or not the median values differend significantly among the three sub-groups participating in the study.

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CHAPTER IV

PRESENTATION AND ANALYSIS OF THE DATA

The procedures for the collection and analysis of data for this study were designed to determine which instructional approaches, techniques and materials reading specialists perceive to be the most effective for seventh and eighth grade remedial reading programs and to determine which procedures are most effective for training the teachers assigned to teach these postelementary courses. This study posed the following questions for investigation:

(1) Which instructional approaches do reading specialists recommend as the most effective in a junior high remedial program? (2) What are the most recommended approaches? (3) Which teaching techniques and which materials do reading specialists recommend as effective and appropriate in a junior high remedial reading program? (4) What are the most recommended techniques and materials? (5) What procedures do reading specialists recommend as effective for teacher in-service? (6) What are the most recommended procedures? and (7) What are the differences in the recommendations of the three sub-groups: college and university reading professors, service center reading specialists, and school reading specialists? This chapter summarizes the

procedures for the collection and treatment of data and presents the data for analysis and discussion.

Procedures

Data for this study were collected by the Delphi research technique, which was described in detail in Chapter III. Basically, the Delphi is a method of structuring a group communication process to elicit and evaluate opinions and judgements, provide feedback for re-evaluation, and determine consensus among the group (Linstone & Turoff, 1975). Conducted in a series of rounds, the Delphi modification for this study was a three-round collection process. Although a Delphi can be carried out to four or five rounds (Martino, 1972; Sackman, 1974), three rounds are sufficient, in most cases, to attain stability in responses (Linstone & Turoff, 1975). The first round was unstructured and open-ended, with the purpose of eliciting initial ideas and recommendations. In the second round, the panelists rated the recommendations developed from round one as to their perceived effectiveness. Round three was a review and re-evaluation process. Sixty-two panelists responded to Questionnaire I in Round One. Of these sixty-two panelists, fifty-seven responded to Questionnaire II in Round Two. Fifty-four of these panelists responded to Questionnaire III in the third and final round.

The statistics for a Delphi include a measure of

central tendency because, regardless of the asymmetry of a distribution, it can always be interpreted as the middle value (Ferguson, 1976). Medians were computed in order to represent degrees of effectiveness given to each recommendation by the panelists on Questionnaires II and III. The interquartile range (IQR) was used as the measure of dispersion. Interquartile ranges were computed to represent degrees of consensus among panelists' responses on Questionnaires II and III. The median test, a nonparametric test to determine whether significant differences exist between two or more groups (Roscoe, 1975; Ferguson, 1976), was then used in order to determine whether or not the median values differed significantly among the three sub-groups participating in the study.

Following Round Three of the study, the perceptions of the panelists regarding the instructional approaches to teaching seventh and eighth grade remedial reading, techniques and materials for postelementary remedial reading, and procedures for training remedial reading teachers were ranked in descending degrees of effectiveness as determined by their median values. Median scores were analyzed according to the following intervals of effectiveness established for this study: 4.50-5.00, very high effectiveness level; 4.00-4.49, high effectiveness level; 3.00-3.99, moderate effectiveness level; and 1.00-2.99, very little or

no effectiveness level. These median ranges were adapted from Delphi studies conducted by Abungu (1975), Sloan (1979), and Cortina (1983). Also, the distribution of median scores (effectiveness) were analyzed in relation to interquartile range scores (consensus). For establishing levels of consensus, the range between the highest interquartile score and the lowest interquartile score was arbitrarily sub-divided into five equal parts, resulting in the following levels: 0.66-0.95, very high consensus level; 0.96-1.26, high consensus level; 1.27-1.56, moderate consensus level; 1.57-1.87, little consensus level; and 1.88-2.18, very little or no consensus level. This method of determining consensus levels was adapted from the Sloan (1979) and Cortina (1983) studies.

Presentation, Analysis, and Discussion of Data

In order to respond to the seven research questions posed by this study, the following subsections were established: (1) determination of degrees of effectiveness and degrees of consensus, (2) determination of degrees of effectiveness and degrees of consensus regarding instructional approaches to teaching seventh and eighth grade remedial reading, (3) determination of degrees of effectiveness and degrees of consensus regarding teaching techniques for postelementary remedial reading, (4) determination of degrees of effectiveness and degrees of

consensus for materials to be used in seventh and eighth grade remedial reading programs, (5) determination of degrees of effectiveness and degrees of consensus regarding in-service procedures for training postelementary remedial reading teachers, and (6) determination of sub-group (college and university reading specialists, Education Service Center reading specialists, school reading specialists) differences.

Determination of Degrees of Effectiveness
and Degrees of Consensus

Presentation of data by levels of effectiveness.--The data collected from Round Three of the Delphi reflect the final re-evaluative ratings of the fifty-four panelists who responded to Questionnaire III. In each of the four categories established for this study (instructional approaches to teaching seventh and eighth grade remedial reading, teaching techniques for postelementary remedial reading, materials to be used in seventh and eighth grade remedial reading programs, in-service procedures for training post-elementary remedial reading teachers) the recommendations were ranked in descending order as determined by Round Three median scores. The recommendations were then analyzed according to the established levels of effectiveness: 4.50-5.00, very high effectiveness level; 4.00-4.49, high effectiveness level; 3.00-3.99, moderate effectiveness level; and 1.00-2.99, very little or no effectiveness level.

Presentation of data by levels of consensus.--Delphi methodology uses two scores to show degrees of consensus. The median represents not only the level of effectiveness given to a recommendation by the panelists, but also the consensus of the panel regarding the ranking of a particular recommendation within a total group of recommendations. The interquartile range (IQR) shows how much the panelists agree or disagree on the ranking of a given recommendation. For this study, total group interquartile range values were computed for each recommendation following Round Two and Round Three. The IQR value showing the greatest degree of consensus was 0.66 and the IQR value showing the least degree of consensus was 2.18. The IQR represents the size of the dispersion of the middle 50 percent of the ratings for each recommendation.

For each category established for this study (instructional approaches to teaching seventh and eighth grade remedial reading, teaching techniques for postelementary remedial reading, materials to be used with seventh and eighth grade remedial reading, in-service procedures for training postelementary remedial reading teachers), IQR values and median scores were plotted in matrices for both Round Two and Round Three. The same levels of effectiveness as detailed earlier were used across the top of the matrices for plotting median values: 4.50-5.00, very high effectiveness level; 4.00-4.49, high effectiveness level; 3.00-3.99,

moderate effectiveness level; and 1.00-2.99, very little or no effectiveness level. For plotting the IQR values, the range between the highest IQR value (2.18) and the lowest IQR value (0.66) was arbitrarily divided into five equal parts. This process established five consensus levels, each with a range of approximately 0.304. These consensus levels are presented in descending order down the left side of the matrices: very high consensus level, 0.66-0.95; high consensus level, 0.96-1.26; moderate consensus level, 1.27-1.56; little consensus level, 1.57-1.87; and very little or no consensus level, 1.88-2.18.

The matrices from Round Two and Round Three were compared and analyzed to illustrate the relationships between the IQR values and median scores and to illustrate the shift of IQR values and median scores which occurred from Questionnaire II to Questionnaire III.

Determination of Degrees of Effectiveness and
Degrees of Consensus Regarding Instructional
Approaches to Teaching Seventh and Eighth
Grade Remedial Reading

Presentation of data by levels of effectiveness.--The first nine recommendations on the rating instrument developed for this study addressed instructional approaches to teaching seventh and eighth grade remedial reading. These nine recommendations are ranked in descending order according to Round Three median scores and presented in Table I. As indicated by the data in Table I, only one

TABLE I
 INSTRUCTIONAL APPROACHES TO TEACHING SEVENTH AND EIGHTH GRADE REMEDIAL READING
 RANKED ACCORDING TO THEIR PERCEIVED EFFECTIVENESS ON QUESTIONNAIRE III

ORDER BY MEDIAN	RECOMMENDATIONS	MEDIAN	INTERQUARTILE RANGE
1	A diagnostic/prescriptive approach in which the instructional plan for each student is based on pre-testing assessment of strengths and weaknesses and subsequent use of a wide variety of materials.	4.54	1.35
2	An eclectic approach which would utilize a variety of approaches and materials.	4.30	1.29
3	A basal reader approach supported by auxiliary materials from other sources.	3.83	1.13
4	A holistic approach utilizing methods of reading that emphasize learning to read by reading, de-emphasizing specific skill sequences.	3.79	1.58
5	A language-experience approach in which students dictate and/or write individual or group stories in their natural language that provide a context for studying vocabulary and comprehension.	3.55	1.70
6	A meaning-centered approach which focuses on the use of content area textbooks to develop efficient reading and study skills.	3.33	1.19
7	An individualized, self-paced approach based on student needs and interests which utilizes contracts and teacher-pupil interviews/conferences.	3.28	1.41
8	A functional approach that centers around mastering reading skills necessary to cope with the reading requirements of everyday life.	3.22	1.11
9	A basal reader approach at the appropriate level for the student in which skills are introduced and practiced according to the prescribed scope and sequence of the series.	3.02	1.15

recommendation of an instructional approach was rated to be very highly effective. Panelists perceived a diagnostic/prescriptive approach in which the instructional plan for each student is based on pre-testing assessment of strengths and weaknesses and the subsequent use of a wide variety of materials (median: 4.54) to be very highly effective. A highly effective rating was given to the use of an eclectic approach which would utilize a variety of approaches and materials (median: 4.30).

The remaining seven instructional approaches were rated to be moderately effective: a basal reader approach supported by auxiliary materials from other sources (median: 3.83), a holistic approach utilizing methods of reading that emphasize learning to read by reading, de-emphasizing specific skill sequences (median: 3.79), a language-experience approach in which students dictate and/or write individual or group stories in their natural language that provide a context for studying vocabulary and comprehension (median: 3.55), a meaning-centered approach which focuses on the use of content area textbooks to develop efficient reading and study skills (median: 3.33), an individualized, self-paced approach based on student needs and interests which utilizes contracts and teacher-pupil interviews/conferences (median: 3.28), a functional approach that centers around mastering reading skills necessary to cope with the reading requirements of everyday life (median: 3.22), and a basal reader

approach at the appropriate level for the student in which skills are introduced and practiced according to the prescribed scope and sequence of the series (median: 3.02).

Presentation of data by levels of consensus.--The total group IQR values for the nine instructional approaches to teaching seventh and eighth grade remedial reading appear with the ranked statements in Table I. The IQR value showing the greatest consensus was 1.13, indicating that panelists had a high degree of consensus in rating a basal reader approach supported by auxiliary materials as moderately effective (median: 3.83). The IQR value showing the least degree of consensus was 1.70, indicating that panelists had little degree of consensus in rating a language-experience approach as moderately effective (median: 3.55).

In Table II, the distribution of IQR values and median scores of the recommendations regarding instructional approaches to teaching seventh and eighth grade remedial reading after Round Two are presented. In Table III, the distribution of IQR values and median scores for these instructional approaches after Round Three are presented. A comparison of these matrices in Tables II and III indicates the following changes after the re-evaluative process of Round Three.

1. Recommendation 1 shifted from a highly effective rating to a very highly effective rating.
2. Four recommendations (3,6,8,9) shifted from a

TABLE II

DISTRIBUTION FOR ROUND II TOTAL GROUP INTERQUARTILE RANGE VALUES AND MEDIAN SCORES OF RECOMMENDATIONS REPRESENTING PERCEIVED INSTRUCTIONAL APPROACHES TO TEACHING SEVENTH AND EIGHTH GRADE REMEDIAL READING

INTERQUARTILE RANGE (CONSENSUS)	MEDIAN (EFFECTIVENESS)			
	4.50-5.00 VERY HIGH	4.49-4.00 HIGH	3.00-3.99 MODERATE	1.00-2.99 VERY LITTLE (OR NONE)
0.66-0.95 VERY HIGH				
0.96-1.26 HIGH				
1.27-1.56 MODERATE		1, 2*	3, 6, 8, 9	
1.57-1.87 LITTLE			5, 7	
1.88-2.18 VERY LITTLE (OR NONE)			4	

*Numbers in cells correspond to ranked recommendations in Table I.

TABLE III

DISTRIBUTION FOR ROUND III TOTAL GROUP INTERQUARTILE RANGE VALUES AND MEDIAN SCORES OF RECOMMENDATIONS REPRESENTING PERCEIVED INSTRUCTIONAL APPROACHES TO TEACHING SEVENTH AND EIGHTH GRADE REMEDIAL READING

INTERQUARTILE RANGE (CONSENSUS)	MEDIAN (EFFECTIVENESS)			
	4.50-5.00 VERY HIGH	4.49-4.00 HIGH	3.00-3.99 MODERATE	1.00-2.99 VERY LITTLE (OR NONE)
0.66-0.95 VERY HIGH				
0.96-1.26 HIGH			3, 6, 8, 9	
1.27-1.56 MODERATE	1*	2	7	
1.57-1.87 LITTLE			4, 5	
1.88-2.18 VERY LITTLE (OR NONE)				

*Numbers in cells correspond to ranked recommendations in Table I.

moderate degree of consensus to a high degree of consensus regarding their effectiveness rating.

3. Recommendation 4 shifted from a level of very little or no consensus to a level of little consensus.

4. Recommendation 7 shifted from a level of little consensus to a level of moderate consensus.

This shift toward more agreement regarding the ratings of six of the instructional approaches to teaching seventh and eighth grade remedial reading indicates that the characteristic of Delphi methodology which provides for movement toward consensus was in operation in this study.

In Table III, the distribution of IQR values and median scores after the third round re-evaluative process, the following significant observations are illustrated.

1. Although recommendation 1, a diagnostic/prescriptive approach, is the only instructional approach rated to be very highly effective, the degree of consensus is only moderate, indicating some disagreement among the panelists.

2. Four recommendations (3,6,8,9) ranked in the interval of moderate effectiveness had a high degree of consensus, indicating that the panelists highly agree that these particular approaches to teaching seventh and eighth grade remedial reading are only moderately effective. These approaches are a basal reader approach supported by auxiliary materials from other sources, a meaning-centered approach, a functional approach, and a basal reader approach at the appropriate

level for the student in which skills are introduced and practiced according to the prescribed scope and sequence of the series.

3. Two recommendations (4,5) ranked in the interval of moderately effective had little degree of consensus, indicating that the panelists disagreed regarding the effectiveness of these instructional approaches. These recommendations were for a holistic approach and a language-experience approach.

Determination of Degrees of Effectiveness and
Degrees of Consensus Regarding Teaching
Techniques for Postelementary
Remedial Reading

Presentation of data by levels of effectiveness.--The next thirty-six recommendations on the rating instrument developed for this study addressed teaching techniques for seventh and eighth grade remedial reading instruction. These thirty-six recommendations are ranked in descending order according to Round Three median scores and presented in Table IV. As indicated by the data in Table IV, two recommendations were rated to be highly effective. Panelists perceived instruction and practice on a level where students can experience initial success (median: 4.84) and teaching vocabulary in context (median: 4.73) to be very highly effective teaching techniques.

The data in Table IV indicates that eight teaching techniques were rated as highly effective: systematic

TABLE IV
 TEACHING TECHNIQUES FOR SEVENTH AND EIGHTH GRADE REMEDIAL READING RANKED
 ACCORDING TO THEIR PERCEIVED EFFECTIVENESS ON QUESTIONNAIRE III

ORDER BY MEDIAN	RECOMMENDATIONS	MEDIAN	INTERQUARTILE RANGE
1	Instruction and practice on a level where students can experience initial success.	4.84	0.66
2	Teaching vocabulary in context.	4.73	1.01
3	Systematic instruction involving guidance, practice, and instructional feedback, such as DRA (Directed Reading Activity) and DRTA (Directed Reading-Thinking Activity).	4.36	1.22
4	Read aloud to students a variety of books for enjoyment and to develop an appreciation of literature and reading.	4.32	1.31
5	Questioning to develop higher level thinking skills, as developed by Bloom's Taxonomy.	4.27	1.08
6	Sustained silent reading to provide practice with student-selected materials.	4.14	1.27
7	Assist students in monitoring their own comprehension and processes while reading, making them aware of the skills needed for specific purposes in reading.	4.10	0.95
8	Reading aloud to students for instructional purposes, such as providing a model for oral reading and/or to develop listening skills.	4.10	1.45
9	Small group instruction based on skill deficiencies.	4.02	1.14
10	Cloze procedures to develop the use of context clues/comprehension.	4.00	1.63
11	Instruction in a systematic method for comprehending content area texts, such as SQ3R (Robinson); CONSTRUCT (Vaughn); ReQuest (Manzo).	3.98	1.31
12	Pre-teaching vocabulary.	3.98	1.32

TABLE IV - Continued

ORDER BY MEDIAN	RECOMMENDATIONS	MEDIAN	INTERQUARTILE RANGE
13	Questioning over instructional materials to assess comprehension.	3.96	1.00
14	Periodic student-teacher interviews for instruction and evaluation.	3.90	1.42
15	Teaching questioning strategies for comprehending text by use of the who, what, when, where, and how method.	3.88	1.17
16	Re-readings of text to improve comprehension.	3.76	1.33
17	Mastery learning procedures which includes pre-testing to identify sub-skills to be taught, direct instruction, practice, post-testing, and, if necessary for mastery, re-teaching.	3.75	1.49
18	Study of thematic book units, such as science-fiction, mythology, folklore, fantasy, mystery--for teaching reading skills.	3.73	1.55
19	Frequent sustained writing of newspapers, diaries, journals, and dialogue.	3.50	1.59
20	Word recognition taught through structural analysis, including affixes, root words, and syllables.	3.45	1.35
21	Provide tutorial assistance for content area assignments that require effective reading.	3.29	1.14
22	Use of peer tutors.	3.24	1.26
23	Individualized, student-selected reading, monitored by teacher conferences for instructional purposes.	3.23	1.93
24	Use outlining to teach main idea and supporting details.	3.20	1.26

TABLE IV - Continued

ORDER BY MEDIAN	RECOMMENDATIONS	MEDIAN	INTERQUANTILE RANGE
25	Use diagrams to illustrate the various locations of main ideas in a paragraph, such as the inverted triangle, the triangle, etc.	3.07	1.43
26	Cloze procedures for determining reading levels and for matching students to reading materials.	3.00	0.96
27	Paired questioning in which students quiz each other over a given passage.	2.91	0.99
28	Teaching vocabulary through learning the meaning of affixes.	2.91	1.31
29	Choral reading to develop smooth delivery and give students a sense of the flow of oral language.	2.84	1.24
30	Oral reading to improve fluency.	2.78	1.37
31	Word recognition/learning taught through a VAKT (visual, auditory, kinesthetic, tactile) approach, such as the Fernald method.	2.58	1.56
32	Word recognition taught through the use of phonics.	2.46	1.74
33	Word recognition through flash-card drill.	2.10	1.49
34	Word recognition taught through visual analysis, such as letter discrimination, word discrimination, and configuration.	2.07	1.27
35	Neurological Impress technique in which the teacher sits slightly behind the student, orally reads the text while pointing to the part of the text being read, and the student attempts to read along as quickly and accurately as possible.	2.05	1.30
36	Teaching vocabulary through the use of a dictionary.	2.02	1.27

instruction involving guidance, practice, and instructional feedback, such as DRA (Directed Reading Activity) and DRTA (Directed Reading-Thinking Activity) (median: 4.36); read aloud to students a variety of books for enjoyment and to develop an appreciation of literature and reading (median: 4.32); questioning to develop higher level thinking skills, as developed by Bloom's Taxonomy (median: 4.27); sustained silent reading to provide practice with student-selected materials (median: 4.14); assist students in monitoring their own comprehension and processes while reading, making them aware of the skills needed for specific purposes in reading (median: 4.10); reading aloud to students for instructional purposes, such as providing a model for oral reading and/or to develop listening skills (median: 4.10); small group instruction based on skill deficiencies (median: 4.02); and cloze procedures to develop the use of context clues/comprehension (median: 4.00).

The data in Table IV indicates that sixteen of the teaching techniques for postelementary remedial reading instruction were rated as moderately effective: instruction in a systematic method for comprehending content area texts, such as SQ3R (Robinson), CONSTRUCT (Vaughn), ReQuest (Manzo) (median: 3.98); pre-teaching vocabulary (median: 3.98); questioning over instructional materials to assess comprehension (median: 3.96); periodic student-teacher interviews for instruction and evaluation (median: 3.90); teaching

questioning strategies for comprehending text by use of the who, what, when, where, and how method (median: 3.88); re-readings of text to improve comprehension (median: 3.76); mastery learning procedures which includes pre-testing to identify sub-skills to be taught, direct instruction, practice, post-testing, and, if necessary for mastery, re-teaching (median: 3.75); study of thematic units, such as science-fiction, mythology, folklore, fantasy, mystery--for teaching reading skills (median: 3.73); frequent sustained writing of newspapers, diaries, journals, and dialogue (median: 3.50); word recognition taught through structural analysis, including affixes, root words, and syllables (median: 3.45); provide tutorial assistance for content area assignments that require effective reading (median: 3.29); use of peer tutors (median: 3.24); individualized, student-selected reading, monitored by teacher conferences for instructional purposes (median: 3.23); use outlining to teach main idea and supporting details (median: 3.20); use diagrams to illustrate the various locations of main ideas in a paragraph, such as the inverted triangle, the triangle, etc. (median: 3.07); and cloze procedures for determining reading levels and for matching students to reading materials (median: 3.00).

As indicated by the data in Table IV, the remaining ten recommendations regarding teaching techniques were rated as having little or no effectiveness: paired questioning in

which students quiz each other over a given passage (median: 2.91); teaching vocabulary through learning the meaning of affixes (median: 2.91); choral reading to develop smooth delivery and give students a sense of the flow of oral language (median: 2.84); oral reading to improve fluency (median: 2.78); word recognition/learning taught through a VAKT (visual, auditory, kinesthetic, tactile) approach, such as the Fernald method (median: 2.58); word recognition taught through the use of phonics (median: 2.46); word recognition through flash-card drill (median: 2.10); word recognition taught through visual analysis, such as letter discrimination, word discrimination, and configuration (median: 2.07); neurological impress technique in which the teacher sits slightly behind the student, orally reads the text while pointing to the part of the text being read, and the student attempts to read along as quickly and accurately as possible (median: 2.05); and teaching vocabulary through the use of a dictionary (median: 2.02).

Presentation of data by levels of consensus.--The total group IQR values for the thirty-six teaching techniques for seventh and eighth grade remedial reading instruction appear with the ranked statements in Table IV. The IQR value showing the greatest consensus was 0.66, indicating that panelists had a very high degree of consensus in rating instruction and practice on a level where the students can experience initial success as a very highly effective

(median: 4.84) technique. The IQR value showing the least degree of consensus was 1.93, indicating that panelists had very little or no consensus in rating individualized, student-selected reading, monitored by teacher conferences for instructional purposes as a moderately effective (median: 3.23) technique.

In Table V, the distribution of IQR values and median scores of the recommendations regarding teaching techniques for postelementary remedial reading after Round Two are presented. In Table VI, the distribution of IQR values and median scores for these teaching techniques after Round Three are presented. A comparison of the matrices in Tables V and VI indicates the following changes after the re-evaluative processes of Round Three.

1. Recommendation 1 shifted from a high degree of consensus level to a very high degree of consensus level.

2. Recommendation 7 shifted from a moderate degree of consensus level to a very high degree of consensus level.

3. Five recommendations (3,13,15,22,24) shifted from a moderate degree of consensus level to a high degree of consensus level.

4. Recommendation 9 shifted from a moderate level of effectiveness to a high level of effectiveness, with a greater degree of consensus, shifting from little degree of consensus to a high degree of consensus.

5. Recommendation 6 shifted from a moderate level of

TABLE V

DISTRIBUTION FOR ROUND II TOTAL GROUP INTERQUARTILE RANGE VALUES AND MEDIAN SCORES
OF RECOMMENDATIONS REPRESENTING PERCEIVED TEACHING TECHNIQUES FOR
SEVENTH AND EIGHTH GRADE REMEDIAL READING

INTERQUARTILE RANGE (CONSENSUS)	MEDIAN (EFFECTIVENESS)			
	4.50-5.00 VERY HIGH	4.49-4.00 HIGH	3.00-3.99 MODERATE	1.00-2.99 VERY LITTLE (OR NONE)
0.66-0.95 VERY HIGH				
0.96-1.26 HIGH	1,2*	5	21	
1.27-1.56 MODERATE		3,7	11,12,13,15 20,22,24,27	35
1.57-1.87 LITTLE		4,8	6, 9,10,14 16,17,18,19 26,28	29,30,31,32,34 32,34
1.88-2.18 VERY LITTLE (OR NONE)			23,25	33,36

*Numbers in cells correspond to ranked recommendations in Table IV.

TABLE VI

DISTRIBUTION FOR ROUND III TOTAL GROUP INTERQUARTILE RANGE VALUES AND MEDIAN SCORES OF RECOMMENDATIONS REPRESENTING PERCEIVED TEACHING TECHNIQUES FOR SEVENTH AND EIGHTH GRADE REMEDIAL READING

INTERQUARTILE RANGE (CONSENSUS)	MEDIAN (EFFECTIVENESS)			
	4.50-5.00 VERY HIGH	4.49-4.00 HIGH	3.00-3.99 MODERATE	1.00-2.99 VERY LITTLE (OR NONE)
0.66-0.95 VERY HIGH	1*	7		
0.96-1.26 HIGH	2	3,5,9	13,15,21,22 24,26	27,29
1.27-1.56 MODERATE		4,6,8	11,12,14,16 17,18,20,23	28,30,31,33 33,34,35,36
1.57-1.87 LITTLE		10	19	32
1.88-2.18 VERY LITTLE (OR NONE)			23	

*Numbers in cells correspond to ranked recommendations in Table IV.

effectiveness to a high level of effectiveness, with greater consensus, shifting from little degree of consensus to a moderate degree of consensus.

6. Recommendation 26 shifted from little degree of consensus level to a high degree of consensus level.

7. Recommendation 27 shifted from a moderate level of effectiveness to very little or no effectiveness, with a greater degree of consensus, shifting from a moderate degree of consensus to a high degree of consensus.

8. Recommendation 29 shifted from little degree of consensus level to a high degree of consensus level.

9. Nine recommendations (4,8,14,16,17,18,30,31,34) shifted from little degree of consensus level to a moderate degree of consensus level.

10. Recommendation 25 shifted from very little or no degree of consensus level to a moderate degree of consensus level.

11. Recommendation 28 shifted from a moderate effectiveness level to a very little or no effectiveness level, with a greater degree of consensus, shifting from little degree of consensus to a moderate degree of consensus.

12. Two recommendations (33,36) shifted from very little or no consensus level to a moderate degree of consensus level.

13. Recommendation 10 shifted from a moderate level of

effectiveness to a high level of effectiveness, still with little consensus.

This shift toward more agreement regarding the ratings of these twenty-six teaching techniques further illustrates the operating characteristic of Delphi methodology.

In Table VI, the distribution of IQR values and median scores after the third round re-evaluative process, the following significant observations are illustrated.

1. Recommendation 1, instruction and practice on a level where students can experience initial success, has a very high effectiveness rating and a very high degree of consensus, indicating that panelists strongly agree that this is a highly effective teaching technique.

2. Recommendation 2, teaching vocabulary in context, also has a very high effectiveness rating and a high degree of consensus, indicating that panelists are in high agreement as to the effectiveness of this technique.

3. Recommendation 7, assist students in monitoring their own comprehension and processes while reading, making them aware of the skills needed for specific purposes in reading, has a high effectiveness rating, with a very high degree of consensus, indicating that panelists agree very strongly that this is a highly effective technique.

4. Recommendation 3, systematic instruction involving guidance, practice, and instructional feedback, such as DRA (Directed Reading Activity) and DRTA (Directed Reading-

Thinking Activity); 5, questioning to develop higher level thinking skills, as developed by Bloom's Taxonomy; and 9, small group instruction based on skill deficiencies have a high effectiveness level and a high degree of consensus, indicating that panelists are in high agreement as to these teaching techniques being highly effective.

5. Recommendations 4, read aloud to students a variety of books for enjoyment and to develop an appreciation of literature and reading; 6, sustained silent reading to provide practice with student-selected materials; and 8, reading aloud to students for instructional purposes, such as providing a model for oral reading and/or to develop listening skills, are rated as highly effective, yet only have a moderate degree of consensus, indicating that there is some disagreement among panelists regarding these techniques.

6. Recommendation 10, cloze procedures to develop the use of context clues/comprehension, is rated as highly effective, yet has little consensus, indicating that panelists disagree over the rating of this technique.

7. Recommendations 13, questioning over instructional materials to assess comprehension; 15, teaching questioning strategies for comprehending text by use of the who, what, when, where, and how method; 21, provide tutorial assistance for content area assignments that require effective reading; 22, use of peer tutors; 24, use outlining to teach main idea and supporting details; and 26, cloze procedures for

determining reading levels and for matching students to reading materials, are rated as moderately effective, yet panelists reached a high degree of consensus, indicating a strong agreement that these techniques are only moderately effective.

8. Recommendations 27, paired questioning in which students quiz each other over a given passage; and 29, choral reading to develop smooth delivery and give students a sense of the flow of oral language, are rated as having very little or no effectiveness, with a high degree of consensus, indicating that panelists strongly agree that these are not effective techniques.

Determination of Degrees of Effectiveness and
Degrees of Consensus Regarding Materials
for Seventh and Eighth Grade
Remedial Reading Programs

Presentation of data by levels of effectiveness.--The next nineteen recommendations on the rating instrument developed for this study addressed materials to be used in seventh and eighth grade remedial reading programs. These nineteen recommendations are ranked in descending order according to Round Three median scores and presented in Table VII. As indicated by the data in Table VII, only one recommendation regarding materials was rated to be very highly effective. Panelists perceived a wide variety of books for instruction and independent reading, including paper-back libraries, high interest/low vocabulary books, memorable literature

TABLE VII
 MATERIALS FOR SEVENTH AND EIGHTH GRADE REMEDIAL READING RANKED
 ACCORDING TO THEIR PERCEIVED EFFECTIVENESS ON QUESTIONNAIRE III

ORDER BY MEDIAN	RECOMMENDATIONS	MEDIAN	INTERQUARTILE RANGE
1	A wide variety of books for instruction and independent reading, including paper-back libraries, high-interest/low vocabulary books, memorable literature.	4.83	0.70
2	Newspapers, magazines, and life skills materials, such as menus, forms, etc.	4.04	1.20
3	Book kits for developing comprehension, such as the <u>Jamestown Classics</u> , <u>Random House Reading Series</u> , <u>Scholastic's Project Achievement: Reading and Sprint</u> , <u>Reader's Digest's Counterpoint</u> and <u>Triple Takes</u> .	3.91	0.87
4	Audio equipment with accompanying materials for listening centers and/or whole group instruction.	3.75	1.28
5	Reference materials, such as dictionaries, almanacs, and thesauri.	3.70	1.21
6	Microcomputers with software for drill and practice and tutorials.	3.36	1.47
7	Workbook series for developing specific skills, such as the <u>Barnell-Loft</u> , <u>Scholastic</u> , <u>Modern Curriculum Press</u> , <u>Random House</u> , and <u>Jamestown</u> publications.	3.32	1.32
8	Teacher made materials, such as games and skill packets.	3.25	1.16
9	Actual texts used in a variety of content courses.	3.25	1.14
10	State adopted basal reading series, including the accompanying support materials.	3.23	1.37

TABLE VII - Continued

ORDER BY MEDIAN	RECOMMENDATIONS	MEDIAN	INTERQUARTILE RANGE
11	Supplementary reading series designed for below level readers, such as Houghton-Mifflin's <u>Vistas</u> , Harcourt Brace Jovanovich's <u>Rally!</u> , Economy's <u>Keytext</u> , and Scott Foresman's <u>Open Highways</u> .	3.22	1.10
12	Reading kits for individual, self-paced instruction in skills and comprehension, such as the SRA, BFA, and Bomar kits.	3.07	1.06
13	Television, including VCRs for pre-taping and showing special interest shows, commercially produced video tapes.	3.02	1.33
14	Instructional management systems for teaching skills, such as CTB McGraw-Hill's <u>Prescriptive Reading Inventory System</u> , Webster International's <u>High Intensity Tutoring Program</u> , Orbit Management System, Random House's <u>High Intensity Learning System</u> .	2.96	1.02
15	Newspaper- and film-making materials.	2.96	1.21
16	Commercial games for vocabulary/skills reinforcement.	2.95	0.96
17	Comic books.	2.92	0.78
18	<u>Junior Great Books Series</u> .	2.88	1.37
19	Machines with accompanying materials for teaching reading skills, such as the controlled reader, Combo 8, tach-x, language-master, Systems 80, Hoffman.	2.73	1.44

(median: 4.83) to be very highly effective materials. The data in Table VII indicates that one recommendation was rated as highly effective. Panelists perceived newspapers, magazines, and life skills materials, such as menus, forms, etc. (median: 4.04) to be highly effective materials.

As indicated by the data in Table VII, eleven recommendations regarding materials were rated as only being moderately effective: book kits for developing comprehension, such as the Jamestown Classics, Random House Reading Series, Scholastic's Project Achievement: Reading and Sprint, Reader's Digest's Counterpoint and Triple Takes (median: 3.91); audio equipment with accompanying materials for listening centers and/or whole group instruction (median: 3.75) reference materials, such as dictionaries, almanacs, and thesauri (median: 3.70); microcomputers with software for drill and practice and tutorials (median: 3.36); workbook series for developing specific skills, such as the Barnell-Loft, Scholastic, Modern Curriculum Press, Random House, and Jamestown publications (median: 3.32); teacher made materials, such as games and skill packets (3.25); actual texts used in a variety of content courses (median: 3.25); state adopted basal reading series, including the accompanying support materials (median: 3.23) supplementary reading series designed for below level readers, such as Houghton-Mifflin's Vistas, Harcourt Brace Jovanovich's Rally!, Economy's Keytext, and Scott Foresman's Open Highways (median: 3.22);

reading kits for individual, self-paced instruction in skills and comprehension, such as the SRA, BFA, and Bomar kits (median: 3.07); and television, including VCRs for pre-taping and showing special interest shows, commercially produced video tapes (median: 3.02).

As indicated by the data in Table VII, the remaining six recommendations were rated as having little or no effectiveness: instructional management systems for teaching skills, such as CTB McGraw-Hill's Prescriptive Reading Inventory System, Webster International's High Intensity Tutoring Program, Orbit Management System, Random House's High Intensity Learning System (median: 2.96); newspaper- and film-making materials (median: 2.96); commercial games for vocabulary/skills reinforcement (median: 2.95); comic books (median: 2.92); Junior Great Books Series (median: 2.88); and machines with accompanying materials for teaching reading skills, such as the controlled reader, Combo 8, tach-x, language-master, Systems 80, Hoffman (median: 2.73).

Presentation of data by levels of consensus.--The total group IQR values for the nineteen materials recommended for seventh and eighth grade remedial reading programs appear with the ranked statements in Table VII. The IQR showing the greatest degree of consensus was 0.70, indicating that the panelists had a very high degree of consensus in rating a wide variety of books for instruction and independent reading, including paper-back libraries, high

interest/low vocabulary books, memorable literature as highly effective materials (median: 4.83). The IQR value showing the least degree of consensus was 1.47, indicating that panelists had a moderate degree of consensus in rating microcomputers with software for drill and practice and tutorials as being only moderately effective (median: 3.36).

In Table VIII, the distribution of IQR values and median scores of the recommendations regarding materials for postelementary remedial reading after Round Two are presented. In Table IX, the distribution of IQR values and median scores for these materials after Round Three are presented. A comparison of the matrices in Tables VIII and IX indicates the following changes after the re-evaluative process of Round Three.

1. Four recommendations (1,3,16,17) shifted from a high degree of consensus level to a very high degree of consensus level.

2. Six recommendations (2,5,8,9,11,14) shifted from a moderate degree of consensus level to a high degree of consensus level.

3. Recommendation 15 maintained a high degree of consensus level while shifting from a moderate effectiveness level to a little or no effectiveness level.

4. Five recommendations (6,10,13,18,19) shifted from a little degree of consensus level to a moderate degree of consensus level.

TABLE VIII

DISTRIBUTION FOR ROUND II TOTAL GROUP INTERQUARTILE RANGE VALUES AND MEDIAN SCORES
FOR RECOMMENDATIONS REPRESENTING PERCEIVED MATERIALS FOR
SEVENTH AND EIGHTH GRADE REMEDIAL READING

INTERQUARTILE RANGE (CONSENSUS)	MEDIAN (EFFECTIVENESS)			
	4.50-5.00 VERY HIGH	4.49-4.00 HIGH	3.00-3.99 MODERATE	1.00-2.99 VERY LITTLE (OR NONE)
0.66-0.95 VERY HIGH				
0.96-1.26 HIGH	1*		3, 12, 15	16, 17
1.27-1.56 MODERATE		2	4, 5, 7, 8, 9 11, 14	
1.57-1.87 LITTLE			6, 10, 13	18, 19
1.88-2.18 VERY LITTLE (OR NONE)				

*Numbers in cells correspond to ranked statements in Table VII.

TABLE IX
 DISTRIBUTION FOR ROUND III TOTAL GROUP INTERQUARTILE RANGE VALUES AND MEDIAN SCORES
 FOR RECOMMENDATIONS REPRESENTING PERCEIVED MATERIALS FOR
 SEVENTH AND EIGHTH GRADE REMEDIAL READING

INTERQUARTILE RANGE (CONSENSUS)	MEDIAN (EFFECTIVENESS)			
	4.50-5.00 VERY HIGH	4.49-4.00 HIGH	3.00-3.99 MODERATE	1.00-2.99 VERY LITTLE (OR NONE)
0.66-0.95 VERY HIGH	1*		3	16,17
0.96-1.26 HIGH		2	5, 8, 9, 11 12,14	15
1.27-1.56 MODERATE			4, 6, 7, 10 13	18,19
1.57-1.87 LITTLE				
1.88-2.18 VERY LITTLE (OR NONE)				

*Numbers in cells correspond to ranked recommendations in Table VII.

This shift toward more agreement regarding the ratings of fifteen of these materials further indicates that the characteristic of Delphi methodology which provides for movement toward consensus was in operation in this study.

In Table IX, the distribution of IQR values and median scores after the third round re-evaluative process, the following significant observations are illustrated.

1. Recommendation 1, a wide variety of books for instruction and independent reading, including paper-back libraries, high-interest/low-vocabulary books, memorable literature, is the only recommendation to be rated as very highly effective with a very high degree of consensus, indicating that panelists strongly agree that these materials are highly effective.

2. Recommendation 2, newspapers, magazines, and life skills materials, such as menus, forms, etc., has a high effectiveness rating and a high degree of consensus, indicating that panelists have high agreement as to these materials being highly effective.

3. Recommendation 3, book kits for developing comprehension, such as the Jamestown Classics, Random House Reading Series, Scholastic's Project Achievement: Reading and Sprint, Reader's Digest's Counterpoint and Triple Takes, has a moderate effectiveness rating with a very high degree of consensus, indicating that panelists strongly agree that these materials are only moderately effective.

4. Recommendations 16, commercial games for vocabulary/skills reinforcement; and 17, comic books, have a very little or no effectiveness rating, with a very high degree of consensus, indicating that panelists strongly agree that these materials are not effective.

5. Recommendations 5, reference materials, such as dictionaries, almanacs, and thesauri; 8, teacher made materials, such as games and skill packets; 9, actual texts used in a variety of content courses; 11, supplementary reading series designed for below level readers, such as Houghton-Mifflin's Vistas, Harcourt Brace Jovanovich's Rally!, Economy's Keytext, and Scott Foresman's Open Highways; 12, reading kits for individual, self-paced instruction in skills and comprehension, such as SRA, BFA, and Bomar kits; and 14, instructional management systems for teaching skills, such as CTB McGraw-Hill's Prescriptive Reading Inventory System, Webster International's High Intensity Tutoring Program, Orbit Management System, Random House's High Intensity Learning System, are rated as being moderately effective, yet have a high degree of consensus, indicating that panelists are in high agreement that these materials are only moderately effective.

6. Recommendation 15, newspaper- and film-making materials, is rated as having little or no effectiveness with a high degree of consensus, indicating that panelists are in high agreement that these materials are not effective.

Determination of Degrees of Effectiveness and
Degrees of Consensus Regarding In-Service
Procedures for Training Postelementary
Remedial Reading Teachers

Presentation of data by levels of effectiveness.--The remaining forty recommendations on the rating instrument developed for this study addressed in-service procedures for training postelementary remedial reading teachers. These forty procedures are ranked in descending order according to Round Three median scores and presented in Table X. As indicated by the data in Table X, four recommendations regarding in-service procedures were rated to be very highly effective. Panelists perceived after training sessions, provide follow/up-feedback in the classroom (median: 4.84); provide compensatory time from scheduled in-service for teachers who choose to attend summer, evening, or Saturday training programs presented by the local district, service centers, or by professional conferences (median: 4.82); sessions on "how to teach" comprehension (median: 4.80); and actual teaching demonstrations of how to implement specific strategies and/or materials (median: 4.75) to be very highly effective procedures.

As indicated by the data in Table X, eighteen procedures were rated to be highly effective: sharing sessions throughout the year in which teachers exchange effective materials, strategies, schedules, and other practical information (median: 4.40); sessions on specific approaches/

TABLE X
 IN-SERVICE PROCEDURES FOR TRAINING REMEDIAL READING TEACHERS RANKED
 ACCORDING TO THEIR PERCEIVED EFFECTIVENESS ON QUESTIONNAIRE III

ORDER BY MEDIAN	RECOMMENDATIONS	MEDIAN	INTERQUARTILE RANGE
1	After training sessions, provide follow-up/ feedback in the classroom.	4.84	0.66
2	Provide compensatory time from scheduled in-service for teachers who choose to attend summer, evening, or Saturday training programs presented by the local district, service centers, or by pro- fessional conferences.	4.82	0.74
3	Present sessions on "how to teach" comprehension.	4.80	0.81
4	Actual teaching demonstrations of how to implement specific strategies and/or materials.	4.75	0.89
5	Sharing sessions throughout the year in which teachers exchange effective materials, stra- gies, schedules, and other practical information.	4.40	1.19
6	Present sessions on specific approaches/ techniques for teaching reading and study skills, such as language-experience, DRTA, diagnostic/prescriptive, individualized, mastery learning, SQ3R, ReQuest, etc.	4.35	1.04
7	Present sessions on strategies for teaching more than one instructional level within a single class period.	4.31	1.10
8	Present sessions on how to effectively use the resources and instructional materials available.	4.28	1.19
9	Present sessions on administering and inter- preting both formal and informal assessment techniques.	4.26	1.27
10	Present sessions on strategies for working with the disabled reader, such as motiva- tional techniques and recognizing and reaching learning modalities/styles.	4.26	1.27

TABLE X - Continued

ORDER BY MEDIAN	RECOMMENDATIONS	MEDIAN	INTERQUARTILE RANGE
11	Conduct training sessions at the building/ campus level.	4.20	1.18
12	In-service training based on the self- perceived needs of the teachers, established through some form of needs assessment.	4.20	1.00
13	Conduct in-service on non-teaching days.	4.17	1.10
14	Training sessions conducted by local, ex- perienced teachers/reading specialists.	4.16	1.25
15	Present sessions on the process and teaching of writing.	4.15	1.25
16	Visitations to reading classes for obser- vations of effective instruction.	4.13	1.19
17	Schedule training sessions throughout the year.	4.12	1.00
18	Present sessions on classroom organization which would include grouping, record keeping, and classroom management.	4.12	1.10
19	Present sessions to familiarize teachers with adolescent literature.	4.07	1.10
20	Present sessions on the total reading process--how students learn to read-- including the skills and sub-skills involved.	4.05	0.98
21	Present sessions on how to use literature in the remedial reading classroom.	4.02	1.15
22	Attendance by the teachers at pro- fessional conferences, such as TAIR, (Texas Association for the Improvement of Reading) and state and local IRA (Inter- national Reading Association).	4.02	1.02

TABLE X - Continued

ORDER BY MEDIAN	RECOMMENDATIONS	MEDIAN	INTERQUARTILE RANGE
23	Workshops offering "hands-on" activities with materials.	3.98	0.82
24	Present sessions on how to teach vocabulary.	3.94	1.26
25	Cooperative programs between school districts and colleges and universities in which graduate reading courses are presented in a local school.	3.91	0.93
26	Provide several days of in-service training at the beginning of the school year.	3.87	1.14
27	Conduct in-service in 2-3 hour time blocks.	3.87	0.92
28	Training sessions presented by Education Service Center reading specialists.	3.86	1.32
29	In-service training based on the results of a brief pre-test which diagnoses teacher needs.	3.75	1.39
30	Showing video-tapes of effective instruction.	3.71	1.11
31	Present sessions on measuring the readability of materials, including how to match learners with materials.	3.71	1.26
32	Present inspirational sessions designed to "motivate" teachers.	3.71	1.33
33	Make-It/Take-It workshops in which teachers actually make instructional materials.	3.70	1.40
34	Present sessions on the characteristics of the remedial reader.	3.34	1.24

TABLE X - Continued

ORDER BY MEDIAN	RECOMMENDATIONS	MEDIAN	INTERQUARTILE RANGE
35	In-service training based on a teacher evaluation process when principals and/or program directors counsel teachers into needed programs.	3.29	1.40
36	Conduct training sessions at colleges/ universities, community facilities, or district conference facilities.	3.13	1.07
37	Training sessions presented by college and university reading professors.	3.05	1.00
38	Present "pre-packaged" training series, such as <u>The Right to Read Series</u> , <u>Croft Comprehension In-Service Kits</u> , and the <u>Houghton-Mifflin Inservice Videotapes</u> .	2.69	1.26
39	Conduct in-service after school in 30-60 minute blocks of time.	2.61	1.96
40	Training sessions presented by representatives of publishing companies.	2.28	1.22

techniques for teaching reading and study skills, such as language-experience, DRTA, diagnostic/prescriptive, individualized, mastery learning, SQ3R, ReQuest, etc. (median: 4.35); sessions on strategies for teaching more than one instructional level within a single class period (median: 4.30); sessions on how to effectively use the resources and instructional materials available (median: 4.28); sessions on administering and interpreting both formal and informal assessment techniques (median: 4.26); sessions on strategies for working with the disabled reader, such as motivational techniques and recognizing and reaching learning modalities/styles (median: 4.26); training sessions at the building/campus level (median: 4.20); in-service training based on the self-perceived needs of the teachers, established through some form of needs assessment (median: 4.20); in-service on non-teaching days (median: 4.17); training sessions conducted by local, experienced teachers/reading specialists (median: 4.16); sessions on the process and teaching of writing (median: 4.15); visitations to reading classes for observation of effective instruction (median: 4.13); training sessions throughout the year (median: 4.12); sessions on classroom organization which would include grouping, record keeping, and classroom management (median: 4.12); sessions to familiarize teachers with adolescent literature (median: 4.07); sessions on the total reading process--how students learn to read--including the skills and sub-skills involved

(median: 4.05); sessions on how to use literature in the remedial classroom (median: 4.02); and attendance by the teachers at professional conferences, such as TAIR (Texas Association for the Improvement of Reading) and state and local IRA (International Reading Association) (median: 4.02).

As indicated by the data in Table X, fifteen procedures were rated to be moderately effective: workshops offering "hands-on" activities with materials (median: 3.98); sessions on how to teach vocabulary (median: 3.94); cooperative programs between school districts and colleges and universities in which graduate reading courses are presented in a local school (median: 3.91); several days of in-service training at the beginning of the school year (median: 3.87); in-service in 2-3 hour time blocks (median: 3.87); sessions presented by Education Service Center reading specialists (median: 3.86); in-service training based on the results of a brief pre-test which diagnoses teacher needs (median: 3.75); showing video-tapes of effective instruction (median: 3.71); sessions on measuring the readability of materials, including how to match learners with materials (median: 3.71); inspirational sessions designed to "motivate" teachers (median: 3.71); make-it/take-it workshops in which teachers actually make instructional materials (median: 3.70); sessions on the characteristics of the remedial reader (median: 3.34); in-service training based on a teacher evaluation process when principals and/or program

directors counsel teachers into needed programs (median: 3.29); training sessions at colleges/universities, community facilities, or district conference facilities (median: 3.13); and training sessions presented by college and university reading professors (median: 3.05).

As indicated by the data in Table X, the remaining three procedures were rated to have little or no effectiveness: "pre-packaged" training series, such as The Right to Read Series, Croft Comprehension In-Service Kits, and the Houghton-Mifflin Inservice Videotapes (median: 2.69); in-service after school in 30-60 minute blocks of time (median: 2.61); sessions presented by representatives of publishing companies (median: 2.28).

Presentation of data by levels of consensus.--The total group IQR values for the forty procedures recommended for training postelementary remedial reading teachers appears with the ranked statements in Table X. The IQR value showing the greatest degree of consensus was 0.66, indicating that panelists had a very high degree of consensus in rating after training sessions, provide follow-up/feedback in the classroom as a highly effective procedure (median: 4.84). The IQR value showing the least degree of consensus was 1.96, indicating that panelists had very little or no consensus in rating in-service after school in 30-60 minute time blocks as being not effective.

In Table XI, the distribution of IQR values and median scores of the recommendations regarding procedures for training remedial reading teachers after Round Two are presented. In Table XIII, the distribution of IQR values and median scores for these procedures after Round Three are presented. A comparison of the matrices in Tables XI and XII indicates the following changes after the re-evaluative process of Round Three.

1. Six recommendations (1,2,3,4,25,27) shifted from a high degree of consensus level to a very high degree of consensus level.

2. Fourteen recommendations (7,8,11,14,15,17,18,21,22,26,31,34,36,37) shifted from a moderate degree of consensus level to a high degree of consensus level.

3. Three recommendations (24,38,40) shifted from a little degree of consensus level to a high degree of consensus level.

4. Recommendation 19 shifted from a moderate effectiveness level to a high effectiveness level, with a greater degree of consensus, shifting from a moderate level of consensus to a high level of consensus.

5. Two recommendations (32,35) shifted from a little degree of consensus level to a moderate degree of consensus level.

6. Recommendation 23 shifted from a high effectiveness rating to a moderate effectiveness rating, with greater

TABLE XI

DISTRIBUTION FOR ROUND II TOTAL GROUP INTERQUARTILE RANGE VALUES AND MEDIAN SCORES
FOR RECOMMENDATIONS REPRESENTING PERCEIVED IN-SERVICE PROCEDURES FOR
TRAINING POSTELEMENTARY REMEDIAL READING TEACHERS

INTERQUARTILE RANGE (CONSENSUS)	MEDIAN (EFFECTIVENESS)			
	4.50-5.00 VERY HIGH	4.49-4.00 HIGH	3.00-3.99 MODERATE	1.00-2.99 VERY LITTLE (OR NONE)
0.66-0.95 VERY HIGH				
0.96-1.26 HIGH	1,2,3,4,6*	5,12,13,16 20,23	25,27,30	
1.27-1.56 MODERATE		7, 8, 9,10 11,14,15,17 18,21,22	19,26,28,31 33,34,36,37	
1.57-1.87 LITTLE			24,32,35	38,40
1.88-2.18 VERY LITTLE (OR NONE)			29	39

*Numbers in cells correspond to ranked recommendations in Table X.

TABLE XII

DISTRIBUTION FOR ROUND III TOTAL GROUP INTERQUARTILE RANGE VALUES AND MEDIAN SCORES
FOR RECOMMENDATIONS REPRESENTING PERCEIVED IN-SERVICE PROCEDURES FOR
TRAINING POSTELEMENTARY REMEDIAL READING TEACHERS

INTERQUARTILE RANGE (CONSENSUS)	MEDIAN (EFFECTIVENESS)			
	4.50-5.00 VERY HIGH	4.49-4.00 HIGH	3.00-3.99 MODERATE	1.00-2.99 VERY LITTLE (OR NONE)
0.66-0.95 VERY HIGH	1,2,3,4*	23	25,27	
0.96-1.26 HIGH	6	5, 7, 8,11 12,13,14,15 16,17,18,20 21,22	19,24,26,30 31,34,36,37	38,40
1.27-1.56 MODERATE		9,10	28,29,32,33 35	
1.57-1.87 LITTLE				
1.88-2.18 VERY LITTLE (OR NONE)				39

*Numbers in cells correspond to ranked recommendations in Table X.

consensus, shifting from a high consensus level to a very high consensus level.

7. Recommendation 29 shifted from a very little or no consensus level to a moderate degree of consensus level. This shift toward more agreement regarding the ratings of twenty-eight of the forty procedures for in-service training definitely indicates that the characteristic of Delphi methodology which provides for movement toward consensus was in operation in this study.

In Table XIII, the distribution of IQR values and median scores after the third round re-evaluative process, the following significant observations are illustrated.

1. Recommendation 1, after training sessions, provide follow-up/feedback in the classroom; 2, provide compensatory time from scheduled in-service for teachers who choose to attend summer, evening, or Saturday training programs presented by the local district, service centers, or by professional conferences; 3, sessions on "how-to-teach" comprehension; and 4, actual teaching demonstrations of how to implement specific strategies and/or materials are rated as very highly effective with a very high degree of consensus, indicating that panelists strongly agree that these procedures are very highly effective.

2. Recommendations 25, cooperative programs between school districts and colleges and universities in which graduate reading courses are presented in a local school;

and 27, in-service in 2-3 hour time blocks, have a moderate effectiveness rating with a very high degree of consensus, indicating that panelists strongly agree that these are only moderately effective procedures.

3. Recommendation 6, sessions on specific approaches/ techniques for teaching reading and study skills, such as language-experience, DRTA, diagnostic/prescriptive, individualized, mastery learning, SQ3R, ReQuest, etc., has a very high effectiveness rating with a high degree of consensus, indicating that panelists strongly agree that this procedure is highly effective.

4. Recommendations 5, sharing sessions throughout the year in which teachers exchange effective materials, strategies, schedules, and other practical information; 7, sessions on strategies for teaching more than one instructional level within a single class period; 8, sessions on how to effectively use the resources and instructional materials available; 11, training sessions at the building/campus level; 12, in-service training based on the self-perceived needs of the teachers, established through some form of needs assessment; 13, in-service on non-teaching days; 14, training sessions conducted by local, experienced teachers/reading specialists; 15, sessions on the process and teaching of writing; 16, visitations to reading classes for observations of effective instruction; 17, training sessions throughout

the school year; 18, sessions on classroom organization which would include grouping, record keeping, and classroom management; 19, sessions to familiarize teachers with adolescent literature; 20, sessions on the total reading process--how students learn to read--including the skills and sub-skills involved; 21, sessions on how to use literature in the remedial classroom; 22, attendance by teachers at professional conferences, such as TAIR (Texas Association for the Improvement of Reading) and state and local IRA (International Reading Association); and 23, workshops offering "hands-on" activities with materials, have a high effectiveness rating with a high degree of consensus, indicating that panelists highly agree that these are highly effective procedures.

5. Recommendations 24, sessions on how to teach vocabulary; 26, several days of in-service training at the beginning of the school year; 30, showing video-tapes of effective instruction; 31, sessions on measuring the readability of materials, including how to match learners with materials; 34, sessions on the characteristics of the remedial reader; 36, training sessions at colleges/universities, community facilities, or district conference facilities; 37, sessions presented by college and university reading professors, have a moderate effectiveness rating with a high degree of consensus, indicating that panelists highly agree that these are only moderately effective procedures.

6. Recommendations 38, "pre-packaged" training series, such as The Right to Read Series, Croft Comprehension In-Service Kits, and the Houghton-Mifflin Inservice Videotapes; and 40, training sessions presented by representatives of publishing companies, have a very little or no effectiveness rating with a high degree of consensus, indicating that panelists highly agree that these procedures are not effective.

7. Recommendation 39, in-service after school in 30-60 minute blocks of time, has a very little or no effectiveness rating with very little or no degree of consensus, indicating that panelists strongly disagree over the rating of this procedure.

Determination of Sub-Group Differences

The reading specialists who served as panelists for this study represented three specific professional areas: college and university reading specialists, Education Service Center reading specialists, and school district reading specialists. Of the fifty-four panelists who responded to Questionnaire III in the third and final round of the Delphi, seven were college and university reading specialists, eleven were Education Service Center reading specialists, and thirty-six were school district reading specialists.

Data collected from Questionnaire III were analyzed by these three sub-groups, using the measures of effectiveness

(median scores) and dispersion (interquartile range values) explained earlier in this chapter. The median test was then computed for each recommendation in order to determine whether or not significant differences existed between the sub-group medians. If the median test chi-square approximation value reached or exceeded the .05 level of significance, it was concluded that the sub-group medians for a particular recommendation differed significantly from each other.

In Tables XIII, XIV, XV, and XVI, the sub-group median and IQR values for the four categories of the study are presented: instructional approaches to teaching seventh and eighth grade remedial reading (Table XIII); teaching techniques for seventh and eighth grade remedial reading instruction (Table XIV); materials for seventh and eighth grade remedial reading programs (Table XV); and in-service procedures for training seventh and eighth grade remedial reading teachers (Table XVI). The recommendations for each category are ranked in descending order by total group median scores, as previously presented in Tables I, IV, VII, and X. In addition, the rank of each recommendation according to sub-group is presented.

In Table XIII, the nine instructional approaches to teaching seventh and eighth grade remedial reading recommended by the panelists, the data indicates three recommendations on which the sub-groups differed significantly regarding their effectiveness: service center

TABLE XIII
 INSTRUCTIONAL APPROACHES TO TEACHING SEVENTH AND EIGHTH GRADE REMEDIAL READING RANKED ACCORDING TO THEIR
 PERCEIVED EFFECTIVENESS WITH SUB-GROUP MEDIAN AND INTERQUARTILE RANGE DIFFERENCES

Order By Median On Questionnaire III	Recommendations	College/University Reading Specialists			Service Center Reading Specialists			School District Reading Specialists			Median Test (Chi-Square Approximate)
		Rank	Median	Interquartile Range	Rank	Median	Interquartile Range	Rank	Median	Interquartile Range	
1	A diagnostic/prescriptive approach in which the instructional plan for each student is based on pre-testing assessment of strengths and weaknesses and subsequent use of a wide variety of materials.	1	4.80	0.90	2	4.58	1.10	1	4.40	1.48	1.389
2	An eclectic approach which would utilize a variety of approaches and materials.	4	4.25	2.54	3	4.38	1.21	2	4.29	1.26	0.049
3	A basal reader approach supported by auxiliary materials from other sources.	8	2.25	1.75	1	4.71	2.02	3	4.00	0.81	11.861*
4	A holistic approach utilizing methods of reading that emphasize learning to read by reading, de-emphasizing specific skill sequences.	2	4.63	0.98	4	4.00	1.33	4	3.46	1.52	7.196*
5	A language-experience approach in which students dictate and/or write individual or group stories in their natural language that provide a context for studying vocabulary and comprehension.	5	4.00	1.50	6	3.60	1.21	5	3.36	3.09	0.834
6	A meaning-centered approach which focuses on the use of content area textbooks to develop efficient reading and study skills.	6	4.00	1.84	7	3.20	1.27	6	3.31	1.08	0.841

*Significant at the .05 level.

TABLE XIII Continued

Order By Median On Questionnaire III	Recommendations	College/University Reading Specialists			Service Center Reading Specialists			School District Reading Specialists			Median Test (Chi-Square Approximate)
		Rank	Median	Interquartile Range	Rank	Median	Interquartile Range	Rank	Median	Interquartile Range	
7	An individualized, self-paced approach based on student needs and interests which utilizes contracts and teacher-pupil interviews/conferences.	3	4.34	1.16	5	3.64	1.56	9	3.08	1.04	9.067*
8	A functional approach that centers around mastering reading skills necessary to cope with the reading requirements of everyday life.	7	3.25	1.23	8	3.20	1.27	7	3.17	0.89	2.452
9	A basal reader approach at the appropriate level for the student in which skills are introduced and practiced according to the prescribed scope and sequence of the series.	9	1.88	0.93	9	2.88	1.54	8	3.17	0.94	0.761

*Significant at the .05 level.

reading specialists rated a basal reader approach supported by auxiliary materials from other sources very high (median: 4.71), school district reading specialists rated it lower (median: 4.00), and college and university reading specialists rated this approach very low (median: 2.25). College and university reading specialists and service center reading specialists rated a holistic approach utilizing methods of reading that emphasize learning to read by reading, de-emphasizing specific skill sequences higher (medians: 4.63 and 4.00) than did school district reading specialists (median: 3.46). College and university reading specialists rated an individualized, self-paced approach based on student needs and interests which utilizes contracts and teacher-pupil interviews/conferences higher (median: 4.34) than did service center and school district reading specialists (medians: 3.64 and 3.08).

In Table XIV, the thirty-six teaching techniques for seventh and eighth grade remedial reading recommended by the panelists, the data indicates five recommendations on which the sub-groups differed significantly regarding their effectiveness: college and university reading specialists rated sustained silent reading to provide practice with student selected materials higher (median: 4.91) than did service center and school district reading specialists (medians: 3.92 and 4.06). School district reading specialists rated pre-teaching vocabulary higher (median: 4.22)

TABLE XIV

TEACHING TECHNIQUES FOR SEVENTH AND EIGHTH GRADE REMEDIAL READING RANKED ACCORDING TO THEIR PERCEIVED EFFECTIVENESS WITH SUB-GROUP MEDIAN AND INTERQUARTILE RANGE DIFFERENCES

Order By Median On Questionnaire III	Recommendations	College/University Reading Specialists			Service Center Reading Specialists			School District Reading Specialists			Median Test (Chi-Square Approximate)
		Rank	Median	Interquartile Range	Rank	Median	Interquartile Range	Rank	Median	Interquartile Range	
1	Instruction and practice on a level where students can experience initial success.	1	4.92	0.67	1	4.81	0.78	1	4.83	0.67	0.437
2	Teaching vocabulary in context.	5	4.63	1.69	2	4.58	1.10	2	4.78	0.86	1.009
3	Systematic instruction involving guidance, practice, and instructional feedback, such as DRA (Directed Reading Activity) and DRTA (Directed Reading Thinking Activity).	8	4.34	1.17	4	4.38	1.26	4	4.36	1.22	0.011
4	Read aloud to students a variety of books for enjoyment and to develop an appreciation of literature and reading.	4	4.63	1.19	5	4.33	1.58	6	4.25	1.40	0.564
5	Questioning to develop higher level thinking skills, as developed by Bloom's Taxonomy.	14	3.75	1.54	7	4.06	0.69	3	4.44	1.06	3.288
6	Sustained silent reading to provide practice with student-selected materials.	2	4.91	0.62	9	3.92	1.13	11	4.06	1.18	9.393*
7	Assist students in monitoring their own comprehension processes while reading, making them aware of the skills needed for specific purposes in reading.	11	4.00	0.70	12	3.86	0.83	8	4.22	1.09	3.726

*Significant at the .05 level.

TABLE XIV - Continued

Order By Median On Questionnaire III	Recommendations	College/University Reading Specialists			Service Center Reading Specialists			School District Reading Specialists			Median Test (Chi-Square Approximate)
		Rank	Median	Interquartile Range	Rank	Median	Interquartile Range	Rank	Median	Interquartile Range	
8	Reading aloud to students for instructional purposes, such as providing a model for oral reading and/or to develop listening skills.	16	3.67	1.38	11	3.88	1.70	5	4.27	1.32	2.263
9	Small group instruction based on skill deficiencies.	19	3.63	1.18	17	3.63	1.27	9	4.21	1.13	4.361
10	Cloze procedures to develop the use of context clues/comprehension.	7	4.63	0.81	18	3.63	1.38	12	4.04	1.54	2.868
11	Instruction in a systematic method for comprehending content area text, such as SQ3R (Robinson); CONSTRUCT (Vaughn); ReQuest (Manzo).	3	4.63	1.19	3	4.40	1.10	16	3.75	1.24	4.413
12	Pre-teaching vocabulary.	22	3.00	1.87	22	3.33	1.65	7	4.22	1.09	13.170*
13	Questioning over instructional materials to assess comprehension.	15	3.75	1.75	16	3.71	1.02	10	4.08	0.99	2.411
14	Periodic student-teacher interviews for instruction and evaluation.	9	4.25	1.67	6	4.13	1.44	15	3.79	1.29	0.641

*Significant at the .05 level.

TABLE XIV - Continued

Order By Median On Questionnaire III	Recommendations	College/University Reading Specialists			Service Center Reading Specialists			School District Reading Specialists			Median Test (Chi-Square Approximate)
		Rank	Median	Interquartile Range	Rank	Median	Interquartile Range	Rank	Median	Interquartile Range	
15	Teaching questioning strategies for comprehending text by use of the who, what, why, when, where, and how method.	17	3.67	1.38	10	3.88	1.40	14	3.92	1.04	0.756
16	Re-readings of text to improve comprehension.	10	4.23	1.17	14	3.80	1.48	18	3.67	1.34	1.852
17	Mastery learning procedures which includes pre-testing to identify sub-skills to be taught, direct instruction, practice post-testing, and, if necessary for mastery, re-teaching.	27	2.67	0.67	15	3.75	1.33	13	3.96	1.48	6.645*
18	Study of thematic book units, such as science-fiction, mythology, folklore, fantasy, mystery... for teaching reading skills.	18	3.63	1.19	8	4.00	1.93	17	3.70	1.66	0.111
19	Frequent sustained writing of newspapers, diaries, journals, and dialogues.	12	4.00	1.25	20	3.40	1.39	20	3.40	1.73	1.460
20	Word recognition taught through structural analysis, including affixes, root words, and syllables.	25	2.88	1.06	21	3.38	1.38	19	3.63	1.27	3.963
21	Provide teacher tutorial assistance for content area assignments that require effective reading.	13	4.00	2.04	19	3.40	1.21	22	3.23	0.95	1.618

*Significant at the .05 level.

TABLE XIV - Continued

Order By Median On Questionnaire III	Recommendations	College/University Reading Specialists			Service Center Reading Specialists			School District Reading Specialists			Median Test (Chi-Square Approximate)
		Rank	Median	Interquartile Range	Rank	Median	Interquartile Range	Rank	Median	Interquartile Range	
22	Use of peer tutors.	23	3.00	1.25	26	3.00	2.04	21	3.32	1.13	0.451
23	Individualized, student-selected reading, monitored by teacher conferences for instructional purposes.	6	4.63	1.81	13	3.86	2.50	26	3.04	1.59	4.206
24	Use outlining to teach main idea and supporting details.	24	3.00	1.38	24	3.00	2.00	23	3.21	1.15	0.287
25	Use diagrams to illustrate the various locations of main ideas in a paragraph, such as the inverted triangle, the triangle, etc.	26	2.80	0.78	23	3.25	2.06	24	3.13	1.43	4.190
26	Cloze procedures for determining reading levels and for matching students to reading materials.	20	3.13	1.06	25	3.00	1.38	28	2.97	0.95	0.203
27	Paired questioning in which students quiz each other over a given passage.	21	3.00	0.70	28	2.66	1.53	29	2.93	0.86	2.441
28	Teaching vocabulary through learning the meaning of affixes.	29	2.38	0.98	27	2.80	1.16	25	3.07	1.40	2.288
29	Choral reading to develop smooth delivery and give students a sense of the flow of oral language.	31	2.20	0.78	31	2.50	1.46	27	3.00	0.90	7.594*

*Significant at the .05 level.

TABLE XIV - Continued

Order By Median On Questionnaire III	Recommendations	College/University Reading Specialists			Service Center Reading Specialists			School District Reading Specialists			Median Test (Chi-Square Approximate)
		Rank	Median	Interquartile Range	Rank	Median	Interquartile Range	Rank	Median	Interquartile Range	
30	Oral reading to improve fluency.	28	2.67	2.00	34	2.33	1.83	30	2.87	1.09	2.156
31	Word recognition/learning taught through a VAKT (visual, auditory, kinesthetic, tactile) approach, such as the Fernald method.	36	1.08	0.58	29	2.63	1.38	31	2.80	1.31	9.090*
32	Word recognition taught through the use of phonics.	32	2.00	3.25	36	1.75	1.87	32	2.23	1.77	0.451
33	Word recognition through flash-card drill.	34	1.38	1.19	30	2.63	1.87	33	2.13	1.21	3.143
34	Word recognition taught through visual analysis, such as letter discrimination, word discrimination, and configuration.	35	1.20	0.90	33	2.40	1.21	34	2.09	1.14	1.933
35	Neurological Impress technique in which the teacher sits slightly behind the student, orally reads the text while pointing to the part of the text being read, and the student attempts to read along as quickly and accurately as possible.	30	2.33	1.75	32	2.50	2.00	36	1.91	1.16	3.182
36	Teaching vocabulary through the use of a dictionary.	33	1.75	1.79	35	2.00	1.73	35	2.06	1.04	0.291

*Significant at the .05 level.

than did college and university and service center reading specialists (medians: 3.00 and 3.33). Service center and school district reading specialists rated mastery learning procedures which includes pre-testing to identify sub-skills to be taught, direct instruction, practice, post-testing, and, if necessary for mastery, re-teaching higher (medians: 3.75 and 3.96) than did college and university reading specialists (median: 2.67). School district reading specialists rated choral reading to develop smooth delivery and give students a sense of the flow of oral language higher (median: 3.00) than did college and university and service center reading specialists (medians: 2.20 and 2.50). School district and service center reading specialists rated word recognition/learning taught through a VAKT (visual, auditory, kinesthetic, tactile) approach, such as the Fernald method higher (medians: 2.80 and 2.63) than did college and university reading specialists (median: 1.08).

In Table XV, the materials for seventh and eighth grade remedial reading instruction as recommended by the panelists, the data indicates only one recommendation on which the three sub-groups differed significantly regarding its effectiveness: service center and school district reading specialists rated instructional management systems for teaching skills, such as CTB McGraw-Hill's Prescriptive Reading Inventory System, Webster International's High

TABLE XV
 MATERIALS FOR SEVENTH AND EIGHTH GRADE REMEDIAL READING RANKED ACCORDING TO THEIR PERCEIVED
 EFFECTIVENESS WITH SUB-GROUP MEDIAN AND INTERQUARTILE DIFFERENCES

Order By Median On Questionnaire III	Recommendations	College/University Reading Specialists			Service Center Reading Specialists			School District Reading Specialists			Median Test (Chi-Square Approximate)
		Rank	Median	Interquartile Range	Rank	Median	Interquartile Range	Rank	Median	Interquartile Range	
1	A wide variety of books for instruction and independent reading, including paper-back libraries, high-interest/low vocabulary books, memorable literature.	1	5.00	0.50	1	4.71	0.92	1	4.81	0.76	3.080
2	Newspapers, magazines, and life skills materials such as menus, forms, etc.	2	4.63	0.98	2	4.20	1.16	3	3.88	1.27	3.659
3	Book kits for developing comprehension, such as the Jamestown Classics, Random House Reading Series, Scholastic's Project Achievement: Reading and Sprint, Reader's Digest's Counterpoint and Triple Takes.	5	3.63	0.98	3	3.86	0.83	2	3.98	0.86	1.288
4	Audio equipment with accompanying materials for listening centers and/or whole group instruction.	6	3.38	1.19	4	3.63	1.56	4	3.83	1.17	1.618
5	Reference materials, such as dictionaries, atlases, and thesauri.	4	3.75	1.75	5	3.63	1.56	5	3.71	1.07	0.162
6	Microcomputers with software for drill and practice and tutorials.	13	2.67	1.88	12	3.20	1.48	6	3.60	1.41	4.133

*Significant at the .05 level.

TABLE XV - Continued

Order By Median On Questionnaire III	Recommendations	College/University Reading Specialists			Service Center Reading Specialists			School District Reading Specialists			Median Test (Chi-Square Approximate)
		Rank	Median	Interquartile Range	Rank	Median	Interquartile Range	Rank	Median	Interquartile Range	
7	Workbook series for developing specific skills, such as the Barnell-Loft, Scholastic, Modern Curriculum Press, Random House, and Jamestown publications.	16	2.25	2.25	11	3.20	1.27	7	3.44	1.24	1.033
8	Teacher made materials, such as games and skill packets.	10	2.88	1.06	8	3.38	1.27	7	3.44	1.24	1.033
9	Actual texts used in a variety of content courses.	3	3.75	1.54	14	3.14	0.83	11	3.22	1.14	1,645
10	State adopted basal reading series, including the accompanying support materials.	17	2.00	0.70	13	3.17	2.00	8	3.38	1.15	2.187
11	Supplementary reading series designed for below level readers, such as Houghton-Mifflin's Vistas, Harcourt Brace Jovanovich's Rally!, Economy's Keytext, Scott Foresman's Open Highways.	15	2.50	1.00	6	3.40	0.99	10	3.29	1.14	3.732
12	Reading kits for individual, self-paced instruction in skills and comprehension such as the SRA, BFA, and Romar kits.	11	2.67	1.17	9	3.33	1.78	13	3.09	0.81	2.441

*Significant at the .05 level.

TABLE XV - Continued

Order By Median On Questionnaire III	Recommendations	College/University Reading Specialists			Service Center Reading Specialists			School District Reading Specialists			Median Test (Chi-Square Approximate)
		Rank	Median	Interquartile Range	Rank	Median	Interquartile Range	Rank	Median	Interquartile Range	
13	Television, including VCRs for pre-taping and showing special interest shows, commercially produced video tapes.	12	2.67	1.38	18	2.92	1.00	12	3.14	1.36	2.166
14	Instructional management systems for teaching skills, such as CTB McGraw-Hill's Prescriptive Reading Inventory System, Webster International's High Intensity Tutoring Program, Orbit Management System, Random-House's High Intensity Learning System.	18	2.00	0.75	15	3.08	1.00	15	3.05	0.90	11.071*
15	Newspaper and film-making materials.	8	3.20	0.90	17	3.00	1.67	17	2.86	1.40	3.558
16	Commercial games for vocabulary/skills reinforcement.	14	2.62	1.69	7	3.40	1.10	16	2.90	0.95	2.682
17	Comic books.	7	3.20	0.90	16	3.00	0.61	18	2.83	1.03	4.655
18	Junior Great Books Series.	9	3.00	1.50	10	3.25	1.02	14	3.06	1.43	4.641
19	Machines with accompanying materials for teaching reading skills, such as the controlled reader, Combo 8, tach-x, language master, Systems 80, Hoffman.	19	2.00	1.83	19	2.67	2.00	19	2.81	1.28	1.179

*Significant at the .05 level.

Intensity Tutoring Program, Orbit Management System, Random House's High Intensity Learning System higher (medians: 3.08 and 3.05) than did college and university reading specialists (median: 2.00).

In Table XVI, in-service procedures for training seventh and eighth grade remedial reading teachers recommended by the panelists, the data indicates four recommendations on which the sub-groups differed significantly regarding their effectiveness: school district reading specialists rated sessions on how to effectively use the resources and instructional materials available higher (median: 4.60) than did college and university and service center reading specialists (medians: 3.38 and 3.94). School district reading specialists also rated sessions on strategies for working with the disabled reader, such as motivational techniques and recognizing and reaching learning modalities/styles higher (median: 4.55) than did college and university and service center reading specialists (medians: 3.20 and 4.08). Service center and school district reading specialists rated training sessions presented by Education Service Center reading specialists higher (medians: 4.38 and 3.85) than did college and university reading specialists (median: 2.75). College and university reading specialists rated training sessions presented by college and university reading specialists higher (median: 4.17) than did service center and school district reading specialists (medians: 3.38 and 2.89).

TABLE XVI
 IN-SERVICE PROCEDURES FOR TRAINING SEVENTH AND EIGHTH GRADE REMEDIAL READING TEACHERS RANKED ACCORDING TO
 THEIR PERCEIVED EFFECTIVENESS WITH SUB-GROUP MEDIAN AND INTERQUARTILE DIFFERENCES

Order By Median On Questionnaire III	Recommendations	College/University Reading Specialists			Service Center Reading Specialists			School District Reading Specialists			Median Test (Chi-Square Approximate)
		Rank	Median	Interquartile Range	Rank	Median	Interquartile Range	Rank	Median	Interquartile Range	
1	After training sessions, provide follow-up/ feedback in the classroom	1	4.92	0.58	1	4.88	0.61	3	4.81	0.78	0.830
2	Provide compensatory time from scheduled inservice for teachers who choose to attend summer, evening, or Saturday training programs presented by the local district, service centers, or by professional conferences.	2	4.92	0.58	2	4.79	0.83	4	4.81	0.80	0.618
3	Present sessions on "how to teach" comprehension.	7	4.63	1.19	3	4.71	1.02	1	4.85	0.66	1.564
4	Actual teaching demonstrations of how to imple- ment specific strategies and/or materials.	3	4.80	0.78	5	4.40	1.30	2	4.81	0.75	2.474
5	Sharing sessions throughout the year in which teachers exchange effective materials, strategies, schedules, and other practical information.	9	4.63	1.81	16	4.00	1.21	7	4.50	1.10	2.092
6	Present sessions on specific approaches/tech- niques for teaching reading and study skills, such as language-experience, DRFA, diagnostic/ prescriptive, individualized, mastery learning, SQ3R, Request, etc.	4	4.75	1.13	7	4.20	1.16	9	4.33	1.07	1.558

*Significant at the .05 level.

TABLE XVI - Continued

Order By Median On Questionnaire III	Recommendations	College/University Reading Specialists		Service Center Reading Specialists		School District Reading Specialists		Median Test (Chi-Square Approximate)			
		Rank	Median	Interquartile Range	Rank	Median	Interquartile Range		Rank	Median	Interquartile Range
7	Present sessions on strategies for teaching more than one instructional level within a single class period.	12	4.38	0.98	13	4.00	0.79	8	4.43	1.07	1.558
8	Present sessions on how to effectively use the resources and instructional materials available.	32	3.38	1.19	18	3.94	0.69	5	4.60	0.94	9.683*
9	Present sessions on administering and interpreting both formal and informal assessment techniques.	19	4.00	1.38	4	4.40	1.10	11	4.27	1.32	0.533
10	Present sessions on strategies for working with the disabled reader, such as motivational techniques and recognizing and reaching learning modalities/styles.	34	3.20	0.78	8	4.08	0.96	6	4.55	1.14	7.655*
11	Conduct training sessions at the building/campus level.	8	4.63	1.19	14	4.00	0.79	15	4.23	1.22	2.889
12	In-service training based on the self-perceived need of the teachers, established through some form of needs assessment.	13	4.33	1.17	15	4.00	0.79	12	4.25	1.01	1.518

*Significant at the .05 level.

TABLE XVI - Continued

Order By Median On Questionnaire III	Recommendations	College/University Reading Specialists			Service Center Reading Specialists			School District Reading Specialists			Median Test (Chi-Square Approximate)
		Rank	Median	Interquartile Range	Rank	Median	Interquartile Range	Rank	Median	Interquartile Range	
13	Conduct in-service on non-teaching days.	21	4.00	1.75	17	4.00	1.33	14	4.24	1.04	0.289
14	Training sessions conducted by local, experienced teachers/reading specialists.	27	3.75	2.38	24	3.90	1.38	10	4.30	1.20	1.750
15	Present sessions on the process and teaching of writing.	10	4.50	1.00	9	4.08	0.96	19	4.12	1.43	0.859
16	Visitations to reading classes for observation of effective instruction.	17	4.13	0.95	19	3.92	0.96	16	4.21	1.29	1.676
17	Schedule training sessions throughout the year.	14	4.25	1.67	10	4.08	0.96	18	4.12	0.91	0.663
18	Present sessions on classroom organization which would include grouping, record keeping, and classroom management	24	3.88	0.94	21	3.92	1.00	13	4.25	1.17	2.726
19	Present sessions to familiarize teachers with adolescent literature.	5	4.63	0.98	20	3.92	0.96	23	4.03	1.10	3.231
20	Present sessions on the total reading process--how students learn to read--including the skills and sub-skills involved.	11	4.50	1.25	27	3.80	1.48	21	4.07	0.78	2.399

*Significant at the .05 level.

TABLE XVI - Continued

Order By Median On Questionnaire III	Recommendations	College/University Reading Specialists			Service Center Reading Specialists			School District Reading Specialists			Median Test (Chi-Square Approximate)
		Rank	Median	Interquartile Range	Rank	Median	Interquartile Range	Rank	Median	Interquartile Range	
21	Present sessions on how to use literature in the remedial reading classroom.	6	4.63	0.98	11	4.08	0.96	26	3.88	1.24	3.498
22	Attendance by the teachers at professional conferences, such as FAIR (Texas Association for the Improvement of Reading) and state and local IRA (International Reading Association).	25	3.88	1.06	22	3.92	1.00	20	4.09	1.12	1.216
23	Workshops offering "hands-on" activities with materials.	23	3.89	0.94	25	3.88	0.61	22	4.05	0.90	0.335
24	Present sessions on how to teach vocabulary.	36	3.00	2.04	29	3.71	1.23	17	4.13	1.19	3.659
25	Cooperative programs between school districts and colleges and universities in which graduate reading courses are presented in a local school.	15	4.17	1.08	26	3.86	0.83	25	3.90	0.99	0.326
26	Provide several days of in-service training at the beginning of the school year.	20	4.00	1.38	33	3.40	1.10	24	3.97	0.95	3.378
27	Conduct in-service in 2-3 hour time blocks.	18	4.00	0.75	12	4.00	0.61	30	3.77	1.14	3.417
28	Training sessions presented by Education Service Center reading specialists.	37	2.75	1.63	6	4.38	1.26	27	3.85	1.20	6.093*

*Significant at the .05 level.

TABLE XVI - Continued

Order By Median On Questionnaire III	Recommendations	College/University Reading Specialists		Service Center Reading Specialists		School District Reading Specialists			Median Test (Chi-Square Approximate)		
		Rank	Median	Interquartile Range	Rank	Median	Interquartile Range	Rank		Median	Interquartile Range
29	In-service training based on the results of a brief pre-test which diagnoses teacher needs.	26	3.88	1.06	28	3.75	1.96	32	3.71	1.40	0.451
30	Showing video-tapes of effective instruction.	22	3.92	0.58	23	3.90	1.25	33	3.61	1.16	2.534
31	Present sessions on measuring the readability of materials, including how to match learners with materials.	28	3.50	1.25	31	3.60	1.21	31	3.77	1.28	0.600
32	Present inspirational sessions designed to "motivate" teachers.	33	3.33	1.38	32	3.58	1.29	29	3.81	1.32	1.179
33	Make-It/Take-It workshops in which teachers actually make instructional materials.	30	3.50	2.00	36	3.33	1.69	28	3.81	1.28	1.354
34	Present sessions on the characteristics of the remedial reader.	29	3.50	1.50	34	3.40	1.10	24	3.30	1.26	0.1660
35	In-service training based on a teacher evaluation process when principals and/or program directors counsel teachers into needed programs.	35	3.00	2.00	30	3.66	1.65	35	3.26	1.33	1.538

*Significant at the .05 level.

TABLE XVI - Continued

Order By Median On Questionnaire III	Recommendations	College/University Reading Specialists			Service Center Reading Specialists			School District Reading Specialists			Median Test (Chi-Square Approximate)
		Rank	Median	Interquartile Range	Rank	Median	Interquartile Range	Rank	Median	Interquartile Range	
36	Conduct training sessions at colleges/universities, community facility, or district conference facilities.	31	3.50	2.00	37	3.13	1.56	36	3.01	0.81	1.743
37	Training sessions presented by college and university reading professors.	16	4.17	1.08	35	3.38	1.56	37	2.89	0.78	16.080*
38	Present "pre-packaged" training series, such as <u>The Right to Read Series</u> , <u>Croft Comprehension In-Service Kits</u> , and the <u>Houghton-Mifflin Inservice Videotapes</u> .	38	2.50	1.25	38	2.93	0.71	39	2.63	1.27	2.160
39	Conduct in-service after school in 30-60 minute blocks of time.	39	2.50	1.75	40	2.50	2.75	38	2.64	1.79	0.1350
40	Training sessions presented by representatives of publishing companies.	40	2.00	0.83	39	2.80	1.48	40	2.22	1.18	3.537

*Significant at the .05 level.

Data were collected for this study from fifty-four reading specialists who met the criteria established for panel members. According to Questionnaire III, over 50 percent reported the use of or observation of use of all except five of the one-hundred-four recommendations. Falling below the 50 percent usage were: paired questioning in which students quiz each other over a given passage (40%); neurological impress technique (48%); Junior Great Books Series (37%); "pre-packaged" in-service training kits (40%); and in-service training based on a teacher evaluation process when principals and/or program directors counsel teachers into needed programs (44%). However, none of these recommendations were rated to be highly effective. Panelists reported over 90% usage of nine of the recommendations; over 80% usage of twenty-three of the recommendations; over 70% usage of thirty-five of the recommendations; over 60% usage of twenty-one of the recommendations; and over 50% usage of eleven of the recommendations.

In this chapter, the data was presented and analyzed in the following ways: (1) total group median scores were ranked according to intervals of effectiveness for each of the four categories established for the study, (2) the relationship between the total group median scores and IQR values was illustrated in matrices for each of the categories, and (3) significant sub-group differences were examined.

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CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

This study examined the perceptions of reading specialists regarding the instructional approaches to teaching reading, teaching techniques and materials, and in-service procedures for training remedial reading teachers they deemed necessary for the successful development and implementation of seventh and eighth grade remedial reading courses as mandated by Texas House Bill 246. A modified Delphi method of research was used in order to identify and measure these perceptions in an objective and systematic way. The results of the study provide recommendations regarding instructional approaches, teaching techniques and materials, and in-service procedures for training teachers, for school districts to consider in developing the framework and implementation of these newly mandated courses.

Purposes of the Study

The specific purposes of the study were to determine the following: (1) recommendations of reading specialists regarding the instructional approaches they deemed most effective in a junior high remedial reading program, (2) the extent to which these educators recommended the same

instructional approaches, (3) the recommendations of reading specialists regarding the teaching techniques and materials they deemed most effective and appropriate in a junior high remedial reading program, (4) the extent to which these educators recommended the same techniques and materials, (5) the recommendations of reading specialists regarding the procedures they deemed most effective for teacher in-service, and (6) the extent to which these educators recommended the same in-service procedures. These purposes were reflected in the seven research questions that were posed for this study.

Design of the Research

The research design for this study was a modified Delphi technique, a method of structuring a group communication process to elicit and evaluate opinions and judgements, provide feedback for re-evaluation and determine consensus among group members (Linstone & Turoff, 1975). This was a three round survey type of procedure, the first round being an open-ended format with the purpose of collecting recommendations from which a rating instrument could be developed. The items on this rating instrument were evaluated in round two. The purpose of round three was to give statistical feedback to the participants and provide for re-evaluation of the rating instrument.

Description of the Panelists

A panel of reading specialists was asked to participate in the study. The panel represented colleges and universities, Education Service Centers, and local school districts in the State of Texas. Originally, sixty-two reading specialists agreed to participate in the study. Fifty-seven panelists participated in round two of the process, and fifty-four panelists participated in the third and final round. Of these panelists who completed all three questionnaires used in the study, seven were college and university reading specialists, eleven were Education Service Center reading specialists, and thirty-six were local school district reading specialists.

Procedures for the Collection of Data

Data for this study were collected in three rounds. In Round One, panelists were asked to give recommendations for instructional approaches to teaching seventh and eighth grade remedial reading, teaching techniques and materials for seventh and eighth grade remedial reading instruction, and in-service procedures for training seventh and eighth grade remedial reading teachers. Questionnaire I used for this purpose was an open-ended format, designed to elicit a wide range of recommendations which the panelists perceived to be effective and appropriate for

postelementary remedial reading programs. Sixty-two panelists returned Questionnaire I.

Round Two used a questionnaire which consisted of one-hundred-four recommendations developed from the free responses on Questionnaire I. On Questionnaire II, nine recommendations addressed instructional approaches to teaching reading, thirty-six recommendations addressed teaching techniques, nineteen recommendations addressed materials for remedial reading instruction, and forty recommendations addressed in-service procedures for training remedial reading teachers. In Round Two panelists were asked to rate each recommendation according to the following scale: 5 = extremely effective; 4 = highly effective; 3 = moderately effective; 2 = slightly effective; and 1 = not effective. Fifty-seven panelists returned a completed Questionnaire II.

For the third and final re-evaluative round, Questionnaire III consisted of the same recommendations as Questionnaire II with the added statistical results of Questionnaire II. Total group median scores and interquartile range values were given for each recommendation. Also, each panelist's original rating for each recommendation on Questionnaire II was recorded on his/her Questionnaire III. For Round Three, panelists were asked to re-evaluate the effectiveness ratings of the recommendations after reviewing the total group statistics from

Round Two. Fifty-four panelists returned a completed Questionnaire III to complete the data collection process.

Analysis and Statistical Treatment of the Data

The responses derived from Questionnaire I were analyzed, combined, reworded, and converted into recommendations regarding instructional approaches, teaching techniques and materials, and in-service topics and procedures. A committee of five reading experts reviewed the responses from Questionnaire I and the recommendations which had been constructed from those responses. They revised and validated the recommendations, agreeing that the resulting one-hundred-four recommendations reflected the panelists responses to Questionnaire I.

The ratings from the fifty-seven panelists who completed Questionnaire II were computed to determine total group degrees of effectiveness (median scores) and degrees of consensus (interquartile range values). The higher the median score for a recommendation, the more effective it was considered by the panelists. The lower the interquartile range value, the more panelists agreed on its effectiveness rating. The median score and IQR value for each recommendation was included on Questionnaire III for the purpose of re-evaluation.

The ratings from the fifty-four panelists who

completed Questionnaire III were re-computed to determine total group degrees of effectiveness (median scores) and degrees of consensus (interquartile range values) after the final re-evaluative process. Also, sub-group median scores and IQR values were computed for each recommendation. The median test was then computed for each recommendation to determine whether or not significant differences existed between the sub-group median scores.

Results

Research Question 1.--Which instructional approaches do reading specialists recommend as the most effective in a junior high remedial reading program? Through a free-response to the open ended questionnaire of Round One, reading specialists identified nine instructional approaches to teaching remedial reading which they perceived to be effective in a postelementary program. After the effectiveness ratings of Round Two and Three, all nine of these identified approaches were considered to be effective to some extent. These instructional approaches are listed in Chapter IV (see Table I.).

Research Question 2.--What are the most recommended approaches? Based on the effectiveness ratings as determined by Round Three, the most recommended approaches were (1) a diagnostic/prescriptive approach in which the instructional plan for each student is based on pre-testing

assessment of strengths and weaknesses and subsequent use of a wide variety of materials; and (2) an eclectic approach which would utilize a variety of approaches and materials.

Research Question 3.--Which teaching techniques and which materials do reading specialists recommend as effective and appropriate in a junior high remedial reading program? Through free-response to the open-ended questionnaire of Round One, reading specialists identified thirty-six teaching techniques which they perceived to be effective and appropriate for a junior high remedial reading program. However, after the effectiveness ratings as determined by Rounds Two and Three, only twenty-six of these identified techniques were considered to be effective to some extent. Through the same process, reading specialists identified nineteen types of materials which they perceived to be effective and appropriate for a junior high remedial reading program. After Rounds Two and Three, thirteen of these materials were considered to be effective to some extent. These techniques and materials are listed in Chapter IV (see Tables IV and VII).

Research Question 4.--What are the most recommended techniques and materials? Based on the effectiveness ratings as determined by Round Three, the most recommended teaching techniques were: (1) instruction and practice on a level where students can experience initial success; (2) teaching vocabulary in context; (3) systematic

instruction involving guidance, practice, and instructional feedback, such as DRA (Directed Reading Activity) and DRTA (Directed Reading-Thinking Activity); (4) read aloud to students a variety of books for enjoyment and to develop an appreciation of literature and reading; (5) questioning to develop higher level thinking skills as developed by Bloom's Taxonomy; (6) sustained silent reading to provide practice with student-selected materials; (7) assist students in monitoring their own comprehension and processes while reading, making them aware of the skills needed for specific purposes in reading; (8) reading aloud to students for instructional purposes, such as providing a model for oral reading and/or to develop listening skills; (9) small group instruction based on skill deficiencies; and (10) cloze procedures to develop the use of context clues/comprehension.

Of these ten identified teaching techniques, the two rated as the most highly effective and on which the reading specialists were in strongest agreement were: (1) instruction and practice on a level where students can experience initial success, and (2) teaching vocabulary in context. Reading specialists also strongly agreed that the technique of assisting students in monitoring their own comprehension and processes while reading, making them aware of the skills needed for specific purposes in reading, was a highly effective technique.

Based on the effectiveness ratings as determined by

Round Three, the most recommended materials were: (1) a wide variety of books for instruction and independent reading, including paper-back libraries, high-interest/low-vocabulary books, memorable literature; and (2) newspapers, magazines, and life skills materials, such as menus, forms, etc. Reading specialists were in strong agreement over the use of a wide variety of books.

Research Question 5.--What procedures do reading specialists recommend as effective for teacher in-service? Through free-response to the open-ended questionnaire of Round One, reading specialists identified forty topics and procedures which they perceived to be effective for in-service training for postelementary remedial reading teachers. After the effectiveness ratings of Rounds Two and Three, thirty-seven of these identified procedures were considered to be effective to some extent. These in-service procedures are listed in Chapter IV (see Table X).

Research Question 6.--What are the most recommended procedures? Based on the effectiveness ratings of Rounds Two and Three, the most recommended in-service procedures on which the reading specialists most strongly agreed were: (1) after training sessions, provide follow-up/feedback in the classroom; (2) provide compensatory time from scheduled in-service for teachers who choose to attend summer, evening, or Saturday training programs presented by the local district, service centers, or by professional

conferences; (3) present sessions on "how-to-teach" comprehension; and (4) actual teaching demonstrations of how to implement specific strategies and/or materials. The other most recommended procedures were: (5) sharing sessions throughout the year in which teachers exchange effective materials, strategies, schedules, and other practical information; (6) sessions on specific approaches/techniques for teaching reading and study skills, such as language-experience, DRTA, diagnostic/prescriptive, individualized, mastery learning, SQ3R, ReQuest, etc.; (7) sessions on strategies for teaching more than one instructional level within a single class period; (8) sessions on how to effectively use the resources and instructional materials available; (9) sessions on administering and interpreting both formal and informal assessment techniques; (10) sessions on strategies for working with the disabled reader, such as motivational techniques and recognizing and reaching learning modalities/styles; (11) conduct training sessions at the building/campus level; (12) in-service training based on the self-perceived needs of the teachers, established through some form of needs assessment; (13) conduct in-service on non-teaching days; (14) training sessions conducted by local, experienced teachers/reading specialists; (15) sessions on the process and teaching of writing; (16) visitations to reading classes for observations of effective instruction; (17) schedule training sessions

throughout the year; (18) sessions on classroom organization which would include grouping, record keeping, and classroom management; (19) sessions to familiarize teachers with adolescent literature; (20) sessions on the total reading process--how students learn to read--including the skills and sub-skills involved; (21) sessions on how to use literature in the remedial classroom; and (22) attendance by teachers at professional conferences, such as TAIR (Texas Association for the Improvement of Reading) and state and local IRA (International Reading Association).

Research Question 7.--What are the differences in the recommendations of the three sub-groups: college and university reading specialists, service center reading specialists, and school reading specialists? Results of the median tests revealed significant differences between the three sub-groups on their ratings of thirteen of the one-hundred-four recommendations. The ratings for the remaining ninety-one recommendations were not significantly different at the .05 level.

Regarding instructional approaches to teaching reading, the sub-groups differed significantly on the ratings of three of the approaches: (1) a basal reader approach supported by auxiliary materials from other sources; (2) a holistic approach utilizing methods of reading that emphasize learning to read by reading, de-emphasizing specific skill sequences; and (3) an

individualized, self-paced approach based on student needs and interests which utilizes contracts and teacher-pupil interviews/conferences. College and university reading specialists rated the holistic approach and the individualized approach higher than did service center and school reading specialists. Service center reading specialists rated the basal reader approach higher than did college and university and school reading specialists.

Regarding the teaching techniques, the sub-groups differed significantly on the ratings of five of the techniques: (1) sustained silent reading to provide practice with student-selected materials; (2) pre-teaching vocabulary; (3) mastery learning procedures which includes pre-testing to identify sub-skills to be taught, direct instruction, practice, post-testing, and, if necessary for mastery, re-teaching; (4) choral reading to develop smooth delivery and give students a sense of the flow of oral language; and (5) word recognition/learning taught through a VAKT (visual, auditory, kinesthetic, tactile) approach, such as the Fernald method. College and university reading specialists rated sustained silent reading higher than did service center and school reading specialists. School reading specialists rated pre-teaching vocabulary and choral reading higher than did service center and college and university reading specialists. Service center and school reading specialists rated mastery

learning procedures and VAKT techniques higher than did college and university reading specialists.

Regarding materials for remedial reading instruction, the three sub-groups differed significantly on the rating for only one of the type of materials: instructional management systems for teaching skills, such as CTB McGraw-Hill's Prescriptive Reading Inventory System, Webster International's High Intensity Tutoring Program, Orbit Management System, Random House's High Intensity Learning System. Although not rated as highly effective, service center and school reading specialists rated these materials higher than did college and university reading specialists.

Regarding in-service procedures, the three sub-groups differed significantly on the ratings of four of the procedures: (1) sessions on how to effectively use the resources and materials available; (2) sessions on strategies for working with the disabled reader, such as motivational techniques and recognizing and reaching learning modalities/styles; (3) training sessions presented by Education Service Center reading specialists; and (4) training sessions presented by college and university reading professors. School district reading specialists rated sessions on using the resources and materials and strategies for working with the disabled reader higher than did service center and college and university reading specialists. Service center reading specialists

rated training sessions presented by Education Service Center reading specialists higher than did college and university and school district reading specialists. College and university reading specialists rated training sessions presented by college and university reading professors higher than did service center and school district reading specialists.

Conclusions

Based on the findings which represent the instructional approaches, teaching techniques and materials, and in-service procedures reading specialists deem to be effective and appropriate for developing and implementing seventh and eighth grade remedial reading programs, the following conclusions were drawn.

1. An instructional program for postelementary remedial reading instruction should provide a method for diagnosing individual student strengths and weaknesses. Based on the results of this assessment process, individual educational plans should be made for each student. Following this process, instruction can be planned for each student on a level where he/she can experience initial success.

2. There is no one best approach to teaching post-elementary remedial reading. A basal series, or a basal series designed especially for low level readers should not

be used as the total scope and sequence of the reading instruction. Instead, a variety of approaches should be used, with some provision for systematic instruction, practice and feedback.

3. Actual reading of a wide variety of materials should be an integral part of the remedial reading program. Teachers should read to students both for enjoyment and for instructional purposes. Students should read for practice and to learn how to monitor their own comprehension.

4. Although some provision should be made for small group instruction based on skill deficiencies, more attention should be paid to comprehension and developing higher level thinking skills.

5. Materials selection for postelementary remedial reading programs should focus on providing a wide variety of books: paper-back libraries, high-interest/low-vocabulary, memorable literature. Newspapers and magazines should also be provided, along with life skills materials such as menus, forms, etc. Other, more traditional instructional materials, such as book kits, reference materials, audio equipment with accompanying software, and workbook series, have some value, but should not constitute the core of the program.

6. Although some other methods of guiding teachers into specific in-service programs have some value, the most

effective basis for in-service training appears to be based on the self-perceived needs of the teachers.

7. In-service training is more effective if conducted at the building or campus level.

8. In-service training should be scheduled throughout the year, preferably on non-teaching days, or by providing compensatory time for teachers to attend workshops/conferences of their choice.

9. Although in-service sessions conducted by Education Service Center and college and university reading professors have some value, training conducted by local, experienced teachers or reading specialists seems to be the most effective.

10. The most appropriate formats for in-service training are visitations to effective classrooms, sharing sessions, and actual demonstrations of instruction and materials.

11. The most important component of any in-service training programs should be to provide follow-up and feedback in the classroom.

Implications of the Study

Based upon the findings of this study, the following implications may be considered.

1. Since this study identified the instructional approaches, and teaching techniques and materials perceived

by reading specialists to be the most effective for post-elementary remedial reading instruction, curriculum directors/supervisors who are in the process of developing seventh and eighth grade remedial reading courses to meet the mandate of Texas House Bill 246 may want to consider these recommendations as they plan instruction and materials selection. In addition, curriculum directors/supervisors of districts who already have postelementary remedial reading courses in place may want to review their plans for instruction and their available materials and resources in light of these recommendations. Although the results of the study reflect only subjective perceptions of the reading specialists, the approaches, techniques and materials recommended should be of interest to school district personnel in charge of reading programs.

2. Since this study also identified recommendations for in-service training for remedial reading teachers, local school district personnel charged with staffing and training the teachers assigned to teach the newly mandated courses may want to consider these recommendations. Here again, although the recommendations are only subjective perceptions of the reading specialists, they should be of interest to school district personnel in charge of staff development.

3. The results of this study may enhance the understandings of and communications between local school district curriculum directors, reading consultants/

supervisors and the teachers who will be responsible for the instruction of the new curriculum. By reviewing the recommendations made by the reading specialists, they may have a better understanding of the needs of both the students and the teachers and re-evaluate their opinions as to the most effective components of a postelementary remedial reading program.

4. The results of this study may also enhance the understandings of and communication between the three subgroups (college and university, service center, and school reading specialists) who participated in the study. By reviewing their combined recommendations and their differences, they may re-evaluate some of their opinions and reach a better understanding of teacher/student needs. This would enable them to work more closely in assisting school districts with the implementation of the new curriculum.

Recommendations for Further Research

Based upon the findings of this study and the review of the related literature, the following recommendations are made for further study.

1. It is recommended that a study be conducted to compare a diagnostic/prescriptive approach in which the instructional plan for each student is based on pre-testing assessment of strengths and weaknesses and subsequent use of

a wide variety of materials and an eclectic approach which would utilize a variety of approaches and materials.

2. It is recommended that experimental studies be conducted to determine the reading achievement gains of seventh and eighth grade remedial reading students using the Fernald Kinesthetic methods and the impress methods. These methods were highly recommended in the remedial reading literature reviewed for this study, yet were rated as being ineffective by the reading specialists who participated in the study.

3. It is recommended that experimental studies be conducted to determine the reading achievement gains of seventh and eighth grade remedial reading students using a holistic approach utilizing methods of reading that emphasize learning to read by reading, de-emphasizing specific skill sequences and a functional approach that centers around mastering reading skills necessary to cope with the reading requirements of everyday life. These approaches to instruction were rated as being only moderately effective by the reading specialists who participated in the study, yet materials which lend themselves to these types of instruction were rated as being highly effective.

4. It is further recommended that an evaluative survey be conducted with seventh and eighth grade remedial reading teachers to compare their perceptions of the

effectiveness of the recommendations presented in this study with the reading specialists who participated in the study.

CHAPTER BIBLIOGRAPHY

Linstone, H. A., & Turoff, M. (Eds.), The Delphi method: Techniques and applications. Reading, Massachusetts: Addison-Wesley Publishing Co., 1975.

APPENDICES

APPENDIX A

ESSENTIAL ELEMENTS FOR SEVENTH AND EIGHTH GRADES

SECONDARY COURSES

ENGLISH LANGUAGE ARTS

GROUP 1 Courses that must be offered by every school districts and that every student must complete:

Grades 7 and 8

English Language Arts, Grade 7 (130 clock hours)
English Language Arts, Grade 8 (130 clock hours)

English for Speakers of Other Languages (ESOL) may be substituted by limited English proficient (LEP) students for the above requirements.

Reading, Grade 7 (130 clock hours)
Reading, Grade 8 (130 clock hours)

NOTE: Students reading below grade level, as determined by local policy, shall be assigned to a course in reading in place of an elective.

Grades 9-12

English I-IV or Correlated Language Arts I-IV (if offered by the district)
English for Speakers of Other Languages, if the district has LEP students.

The following courses may serve as alternatives to English IV or to Correlated Language Arts IV:

Research/Technical Writing	Concurrent enrollment in a
Creative/Imaginative Writing	college course
Practical Writing Skills	Business Communications
Literary Genres	

GROUP II Secondary courses that every district must offer but students may elect to take:

None

GROUP III Courses that school districts may choose to offer as electives:

Grades 7 and 8

Reading, Grade 7
Reading, Grade 8
Speech, Grade 7
Speech, Grade 8

READING, GRADE 7

READING, GRADE 7 shall include the following essential elements:

Descriptors

Word recognition skills to decode written language.

1. Applying contextual clues
2. Using word structure analysis
3. Using advanced dictionaries for word pronunciation

Vocabulary development to understand written materials.

1. Using advanced dictionaries for determining word meaning
2. Choosing appropriate meaning of multimeaning words

Comprehension skills to gain meaning from whatever is read.

1. Identifying and evaluating main ideas and subordinated related details
2. Arranging details in sequential or simultaneous order
3. Perceiving cause-and-effect relationships
4. Summarizing and making generalizations
5. Distinguishing between facts and fictional details
6. Recognizing authors' purpose, point of view, and opinion
7. Comparing and contrasting viewpoints on the same topic
8. Drawing conclusions

Reading skills applied to a variety of practical situations

1. Following written directions including substeps
 2. Identifying the form and function of the various parts of a book
 3. Using the card catalogue and standard library reference
 4. Interpreting diagrams, graphs, and statistical illustrations
 5. Varying rate of reading according to purpose
-

READING, GRADE 8

READING, GRADE 8, shall include
the following essential elements:

Descriptors:

Word attack skills to decode written
language

1. Using structural analysis:
Greek and Latin prefixes
and roots
 2. Using contextual clues to
determine pronunciation of
words
 3. Using advanced dictionaries
-

Vocabulary development to understand
written materials

1. Choosing the appropriate
meaning of multimeaning words
 2. Using specialized and technical
vocabulary related to specific
content areas
-

Comprehension skills to gain meaning
from whatever is read

1. Identifying implied main ideas
and related details
 2. Identifying and evaluating
author's point of view,
purpose and opinions
 3. Distinguishing between and
evaluating fact and nonfact
 4. Predicting probable future
actions or outcomes
 5. Arriving at a generalization from
a given series of details and/
or assumptions
 6. Recognizing forms of propaganda
-

Reading skills applied to a variety
of practical situations

1. Following complex written
directions
 2. Using parts of a book: visual
aids, chapter headings and sub-
headings, italics, color coding,
marginal notes, footnotes,
jacket summaries, appendices
-

READING, GRADE 8, Continued

3. Locating, selecting, and organizing information from periodicals and a variety of reference materials
 4. Interpreting diagrams according to purpose
 5. Varying rate of reading according to purpose
 6. Using phrasing, cadence, and stress to reflect meaning, mood, and tone in oral reading
-

FOR DISCUSSION ONLY

1983

APPENDIX B

LETTERS TO DIRECTORS/SUPERINTENDENTS

ARLINGTON INDEPENDENT SCHOOL DISTRICT
1203 WEST PIONEER PARKWAY
ARLINGTON, TEXAS 76013

September, 1983

(LETTER TO COLLEGE AND UNIVERSITY PROGRAM DIRECTORS)

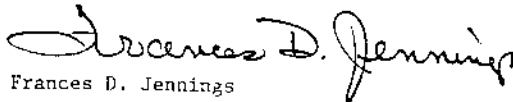
I am conducting a study to determine the instructional approaches, teaching techniques and materials, and in-service procedures reading specialists perceive as necessary for developing and implementing remedial reading for seventh and eighth grade students. Emanating from House Bill 246, it seems evident that such reading courses will be required in Texas by the Fall of 1984. As a Reading/Language Arts Consultant, I am concerned with planning and implementing reading courses which, while complying with the guidelines established by the legislature, will be effective and appropriate for postelementary remedial reading instruction. In my view, having the collective knowledge and expertise of reading experts would allow me to plan courses, select materials, and develop and plan in-service that would increase the probability of providing exemplary reading instruction.

This study will use the Delphi method, which is essentially an objective way to collect and measure subjective data. Three rounds of questionnaires will be used. The first round (enclosed) is an open-ended type of instrument designed to collect the responses of reading specialists regarding the instructional approaches, teaching techniques and materials, and in-service procedures they deem necessary for effective postelementary remedial reading instruction. Subsequent rounds, to be based on input received from round one, will be designed to allow the respondents to refine their recommendations and produce measures of importance and consensus regarding their recommendations.

Would you please select a faculty member to participate in this study? Criteria for selection should include an advanced degree in reading and a special interest in diagnostic and remedial reading. I have enclosed the questionnaire and instructions for the participant. I am requesting that the educator you select for the study complete the questionnaire and return to me by October 10, 1983. If you have any questions or would like to discuss the study, please contact me at home (817/265-0525) or work (817/460-4611).

Would you please return the enclosed postcard regarding the person selected?
Thank you very much for your assistance in initiating this study.

Sincerely,


Frances D. Jennings

Enclosures

ARLINGTON INDEPENDENT SCHOOL DISTRICT

1203 WEST PIONEER PARKWAY
ARLINGTON, TEXAS 76013

September, 1983

(LETTER TO EDUCATION SERVICE CENTER EXECUTIVE DIRECTORS)

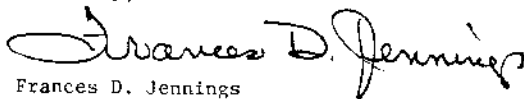
I am conducting a study to determine the instructional approaches, teaching techniques and materials, and in-service procedures reading specialists perceive as necessary for developing and implementing remedial reading for seventh and eighth grade students. Emanating from House Bill 246, it seems evident that such reading courses will be required in Texas by the Fall of 1984. As a Reading/Language Arts Consultant, I am concerned with planning and implementing reading courses which, while complying with the guidelines established in the legislature, will be effective and appropriate for postelementary remedial reading instruction. In my view, having the collective knowledge and expertise of reading experts would allow me to plan courses, select materials, and develop and plan in-service that would increase the probability of providing exemplary reading instruction.

This study will use the Delphi method, which is essentially an objective way to collect and measure subjective data. Three rounds of questionnaires will be used. The first round (enclosed) is an open-ended type of instrument designed to collect the responses of reading specialists regarding the instructional approaches, teaching techniques and materials, and in-service procedures they deem necessary for effective postelementary remedial reading instruction. Subsequent rounds, to be based on input received from round one, will be designed to allow the respondents to refine their recommendations and produce measures of importance and consensus regarding the recommendations.

Would you please select a staff member to participate in this study? Criteria for selection should be either an advanced degree in reading, an All-Level or Secondary Reading Certificate, or at least 12-15 hours in reading instruction, with a special interest in diagnostic and remedial reading. I have enclosed the questionnaire and instructions for the participant. I am requesting that the educator you select for the study complete the questionnaire and return to me by October 10, 1983. If you have any questions or would like to discuss the study, please contact me at home (817/265-0525) or work (817/460-4611).

Would you please return the enclosed postcard regarding the person selected?
Thank you very much for your assistance in initiating this study.

Sincerely,



Frances D. Jennings

Enclosures

ARLINGTON INDEPENDENT SCHOOL DISTRICT

1203 WEST PIONEER PARKWAY
ARLINGTON, TEXAS 76013

September, 1983

(LETTER TO SCHOOL DISTRICT SUPERINTENDENTS)

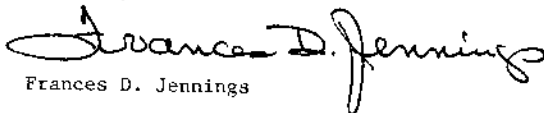
I am conducting a study to determine the instructional approaches, teaching techniques and materials, and in-service procedures reading specialists perceive as necessary for developing and implementing remedial reading for seventh and eighth grade students. Emanating from House Bill 246, it seems evident that such reading courses will be required in Texas by the Fall of 1984. As a Reading/Language Arts Consultant, I am concerned with planning and implementing reading courses which, while complying with the guidelines established by the legislature, will be effective and appropriate for postelementary remedial reading instruction. In my view, having the collective knowledge and expertise of reading experts would allow me to plan courses, select materials, and develop and plan in-service that would increase the probability of providing exemplary reading instruction.

This study will use the Delphi method, which is essentially an objective way to collect and measure subjective data. Three rounds of questionnaires will be used. The first round (enclosed) is an open-ended type of instrument designed to collect the responses of reading specialists regarding the instructional approaches, teaching techniques and materials, and in-service procedures they deem necessary for effective postelementary remedial reading instruction. Subsequent rounds, to be based on input received from round one, will be designed to allow the respondents to refine their recommendations and produce measures of importance and consensus regarding the recommendations.

Would you please select a staff member to participate in this study? The person chosen could be a director, coordinator, consultant, supervisor, or secondary teacher of reading. Criteria for selection should be either an advanced degree in reading, an All-Level or Secondary Reading Certificate, or 12-15 hours in reading courses, with an interest in diagnostic and remedial reading. I have enclosed the questionnaire and instructions for the participant. I am requesting that the educator you select for the study complete the questionnaire and return to me by October 10, 1983. If you have any questions or would like to discuss the study, please contact me at home (817/265-0525) or work (817/460-4611).

Would you please return the enclosed postcard regarding the person selected?
Thank you very much for your assistance in initiating this study.

Sincerely,



Frances D. Jennings

Enclosures

APPENDIX C

LETTER TO PANELISTS

ARLINGTON INDEPENDENT SCHOOL DISTRICT

1203 WEST PIONEER PARKWAY

ARLINGTON, TEXAS 76013

September, 1983

Dear Colleague:

I have asked your Director or Superintendent to select a staff member to assist me in conducting a study. Receipt of this letter means that you have been selected on the basis of your expertise in reading and your interest in and knowledge of diagnostic and remedial reading.

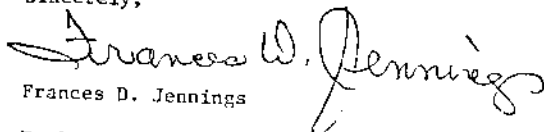
Will you participate in this study in order that I may attempt to determine the most effective and appropriate instructional approaches, teaching techniques and materials, and in-service procedures for developing and implementing post-elementary remedial reading instruction? As a Reading/Language Arts Consultant, I feel that I can assist in developing and implementing exemplary reading courses if I can base decisions upon the collective knowledge and expertise of reading specialists.

This study will use the Delphi method, which is essentially an objective way to collect and measure subjective data. Three rounds of questionnaires will be used to collect and refine the recommendations from college and university reading professors, Regional Service Center reading specialists, and public and private school reading specialists. The first questionnaire (attached to this letter) will require only short statement responses to your perceptions of effective instructional practices. Two additional questionnaires, based on your responses and the responses of other reading specialists, will be sent to you at different times this year. They will require even less time to complete.

I appreciate your assistance with this study. Will you please take a few minutes of your valuable time to complete the questionnaire and information form and return them to me by October 10, 1983 in the stamped envelope provided.

Thank you very much.

Sincerely,


Frances D. Jennings

Enclosures

APPENDIX D

INFORMATION FORM

INFORMATION FORM *

NAME: _____

POSITION: _____
_____BUSINESS ADDRESS: _____

BUSINESS TELEPHONE: _____

CHECK EACH ITEM THAT APPLIES:

1. Master's Degree in Reading
 2. Master's Degree - Other (Specify) _____
 3. Doctorate - Reading
 4. Doctorate - Other (Specify) _____
 5. All-Level Reading Certificate
 6. Secondary Reading Certificate
 7. Elementary Reading Certificate
 8. 12-15 hours (or more) College/University Reading Courses

Would you like to receive the results of this study when it is completed? _____

PLEASE RETURN YOUR COMPLETED QUESTIONNAIRE AND INFORMATION FORM BY
OCTOBER 10, 1983 in the stamped envelope provided.

* The information provided on this form will be confidential. Reading Specialist's names and names of institutions will not be revealed in the results of the study.

APPENDIX E

QUESTIONNAIRE I

QUESTIONNAIRE I

As a result of House Bill 246, in the Fall of 1984 reading instruction will be required for all seventh and eighth grade students reading below grade level. Essential elements to be included in these courses, along with descriptors for each (copies enclosed) will be disseminated to local districts. This is a study to determine recommendations regarding the most effective and appropriate instructional approaches, teaching techniques and materials, and in-service procedures for developing and implementing these mandated reading courses.

You are one of a panel of College and University, Regional Education Service Center, and public and private school staff chosen because of your knowledge and expertise of reading instruction. Please list recommendations in the following categories which you deem as the most EFFECTIVE and APPROPRIATE for seventh and eighth grade remedial reading programs. List as many recommendations as you feel have any significance. Feel free to comment on or substantiate your recommendations.

INSTRUCTIONAL APPROACHES TO TEACHING READING:
(Method or Procedure for the Instruction of Reading)

TEACHING TECHNIQUES:

(Systematic methods or strategies used to teach a particular objective or skill of reading.)

INSTRUCTIONAL MATERIALS:

(All books, workbooks, commercial programs, audio-visual equipment and software, teacher developed materials, etc., which purport to instruct in the skills of reading. PLEASE BE SPECIFIC, LISTING BOTH NAME AND PUBLISHER OF MATERIAL, IF POSSIBLE.)

IN-SERVICE:

(Procedures, ideas, strategies, programs, etc., which will assist in training teachers assigned to teach the newly mandated seventh and eighth grade reading courses. PLEASE SUGGEST EFFECTIVE METHODS FOR PRESENTATION--time, place, presentors duration, etc.,--AS WELL AS TOPICS.)

APPENDIX F

LETTER ACCOMPANYING QUESTIONNAIRE II

ARLINGTON INDEPENDENT SCHOOL DISTRICT

1203 WEST PIONEER PARKWAY
ARLINGTON, TEXAS 76013

November 1, 1983

Thank you for participating in my study regarding seventh and eighth grade remedial reading instruction. Will you assist me further by completing the enclosed questionnaire?

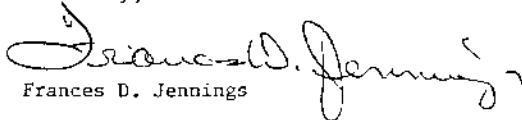
The specific purpose of this study is to identify and prioritize instructional approaches, teaching techniques and materials, and inservice procedures and topics which reading specialists perceive to be the most effective for implementing junior high school remedial reading courses and training the teachers assigned to teach these courses. I hope that the results of this study will assist school districts in implementing and maintaining effective remedial reading programs.

According to the Delphi research method used for this study, the enclosed questionnaire was developed from the responses you and other participants contributed through Questionnaire I. Your responses and the responses of other reading specialists were categorized and then combined, when appropriate, to create the recommendations for this questionnaire. The purpose of this second questionnaire is to determine HOW effective you perceive each of the recommendations to be.

Please complete this questionnaire by Tuesday, November 15, 1983 and return to me in the enclosed stamped envelope.

Thank you very much for sharing your time and your expertise.

Sincerely,



Frances D. Jennings

Enclosures

APPENDIX G

QUESTIONNAIRE II

QUESTIONNAIRE II

NAME _____

This questionnaire was compiled from the recommendations you and other educators (college and university reading professors, service center reading specialists, and public and private school reading specialists) contributed to Questionnaire I regarding instructional approaches, teaching techniques and materials, and inservice procedures and topics for developing and implementing postelementary remedial reading courses.

The PURPOSE of this questionnaire is to determine how EFFECTIVE and appropriate YOU PERCEIVE each of these recommendations.

PLEASE INCLUDE YOUR NAME on this questionnaire so that your responses may be appropriately categorized and so that the results of this questionnaire may be returned to you.

DIRECTIONS: PLEASE CIRCLE THE NUMBER 1, 2, 3, 4, or 5 to the right of each recommendation according to the following scale:

- 1 = Not Effective
- 2 = Slightly Effective
- 3 = Moderately Effective
- 4 = Highly Effective
- 5 = Extremely Effective

PART A: Rate the following instructional approaches to teaching reading according to your opinion of their effectiveness for seventh and eighth grade remedial reading instruction.

- | | | | | | |
|--|---|---|---|---|---|
| 1. A diagnostic/prescriptive approach in which the instructional plan for each student is based on pre-testing assessment of strengths and weaknesses and subsequent use of a wide variety of materials. | 1 | 2 | 3 | 4 | 5 |
| 2. An individualized, self-paced lab approach based on student needs and interests which utilizes contracts and teacher-pupil interviews/conferences. | 1 | 2 | 3 | 4 | 5 |

- | | | | | | |
|--|---|---|---|---|---|
| 3. A language-experience approach in which students dictate and/or write individual or group stories in their natural language that provide a context for studying vocabulary and comprehension. | 1 | 2 | 3 | 4 | 5 |
| 4. A basal reader approach at the appropriate level for the student in which skills are introduced and practiced according to the prescribed scope and sequence of the series. | 1 | 2 | 3 | 4 | 5 |
| 5. An eclectic approach which would utilize a variety of approaches and materials. | 1 | 2 | 3 | 4 | 5 |
| 6. A basal reader approach supported by auxiliary materials from other sources. | 1 | 2 | 3 | 4 | 5 |
| 7. A meaning-centered approach which focuses on the use of content area textbooks to develop efficient reading and study skills. | 1 | 2 | 3 | 4 | 5 |
| 8. A holistic approach utilizing methods of reading that emphasize learning to read by reading, de-emphasizing specific skill sequences. | 1 | 2 | 3 | 4 | 5 |
| 9. A functional approach that centers around mastering reading skills necessary to cope with the reading requirements of everyday life. | 1 | 2 | 3 | 4 | 5 |

PART B: Rate the following teaching techniques/strategies according to your opinion of their effectiveness for seventh and eighth grade remedial reading instruction.

- | | | | | | |
|---|---|---|---|---|---|
| 10. Instruction in a systematic method for comprehending content area text, such as SQ3R (Robinson); CONSTRUCT (Vaughn); ReQuest (Manzo). | 1 | 2 | 3 | 4 | 5 |
| 11. Systematic instruction involving guidance, practice, and instructional feedback, such as DRA (Directed Reading Activity) and DRTA (Directed Reading Thinking Activity). | 1 | 2 | 3 | 4 | 5 |
| 12. Individualized, student-selected reading, monitored by teacher conferences for instructional purposes. | 1 | 2 | 3 | 4 | 5 |

13. Mastery learning procedures which includes pre-testing to identify sub-skills to be taught, direct instruction, practice, post-testing, and, if necessary for mastery, re-teaching.	1	2	3	4	5
14. Sustained silent reading to provide practice with student-selected books.	1	2	3	4	5
15. Read aloud to students a variety of books for enjoyment and to develop an appreciation of literature and reading.	1	2	3	4	5
16. Pre-teaching vocabulary.	1	2	3	4	5
17. Assist students in monitoring their own comprehension processes while reading, making them aware of the skills needed for specific purposes in reading.	1	2	3	4	5
18. Word recognition taught through the use of phonics.	1	2	3	4	5
19. Study of thematic book units, such as science-fiction, mythology, folklore, fantasy, mystery... for teaching reading skills.	1	2	3	4	5
20. Frequent sustained writing of newspapers, diaries, journals, and dialogue.	1	2	3	4	5
21. Word recognition/learning taught through a VAKT (visual, auditory, kinesthetic, tactile) approach, such as the Fernald method.	1	2	3	4	5
22. Small group instruction based on skill deficiencies.	1	2	3	4	5
23. Instruction and practice on a level where students can experience initial success.	1	2	3	4	5
24. Cloze procedures to develop the use of context clues/comprehension.	1	2	3	4	5
25. Teaching vocabulary in context.	1	2	3	4	5
26. Word recognition taught through visual analysis, such as letter discrimination, word discrimination, configuration.	1	2	3	4	5
27. Questioning over instructional materials to assess comprehension.	1	2	3	4	5

28. Cloze procedures for determining reading levels and for matching students to reading materials.	1	2	3	4	5
29. Word recognition taught through structural analysis, including affixes, root words, and syllables.	1	2	3	4	5
30. Questioning to develop higher level thinking skills, as developed by Bloom's Taxonomy.	1	2	3	4	5
31. Reading aloud to students for instructional purposes, such as providing a model for oral reading and/or to develop listening skills.	1	2	3	4	5
32. Use of peer tutors.	1	2	3	4	5
33. Word recognition through flash-card drill.	1	2	3	4	5
34. Paired questioning in which students quiz each other over a given passage.	1	2	3	4	5
35. Teaching vocabulary through learning the meaning of affixes.	1	2	3	4	5
36. Periodic student-teacher interviews for instruction and evaluation.	1	2	3	4	5
37. Re-readings of text to improve comprehension.	1	2	3	4	5
38. Teaching questioning strategies for comprehending text by use of the who, what, why, when, where, and how method.	1	2	3	4	5
39. Provide teacher tutorial assistance for content area assignments that require effective reading.	1	2	3	4	5
40. Use diagrams to illustrate the various locations of main ideas in a paragraph, such as the inverted triangle, the triangle, etc.	1	2	3	4	5
41. Teaching vocabulary through the use of a dictionary.	1	2	3	4	5
42. Oral reading to improve fluency.	1	2	3	4	5
43. Choral reading to develop smooth delivery and give students a sense of the flow of oral language.	1	2	3	4	5

44. Use outlining to teach main idea and supporting details. 1 2 3 4 5
45. Neurological Impress technique in which the teacher sits slightly behind the student, orally reads the text while pointing to the part of the text being read, and the student attempts to read along as quickly and accurately as possible. 1 2 3 4 5

PART C: Rate the following materials according to your opinion of their effectiveness for seventh and eighth grade remedial reading instruction.

46. Workbook series for developing specific skills, such as the Barnell-Loft, Scholastic, Modern Curriculum Press, Random House, and Jamestown publications. 1 2 3 4 5
47. Book kits for developing comprehension, such as the Jamestown Classics, Random House Reading Series, Scholastic's Project Achievement: Reading and Sprint, Reader's Digest's Counterpoint and Triple Takes. 1 2 3 4 5
48. Reading kits for individual, self-paced instruction in skills and comprehension, such as the SRA, BFA, and Bomar kits. 1 2 3 4 5
49. Machines with accompanying materials for teaching reading skills, such as the controlled reader, Combo 8, tach-x, language master, Systems 80, Hoffman. 1 2 3 4 5
50. State adopted basal reading series, including the accompanying support materials. 1 2 3 4 5
51. A wide variety of books for instruction and independent reading, including paperback libraries, high-interest/low-vocabulary books, memorable literature. 1 2 3 4 5
52. Audio equipment with accompanying materials for listening centers and/or whole group instruction. 1 2 3 4 5
53. Newspapers, magazines, and life skills materials, such as menus, forms, etc. 1 2 3 4 5
54. Microcomputers with software for drill and practice and tutorials. 1 2 3 4 5

- | | | | | | |
|---|---|---|---|---|---|
| 55. Supplementary reading series designed for below level readers, such as Houghton-Mifflin's <u>Vistas</u> , Harcourt Brace Jovanovich's <u>Rally!</u> , Economy's <u>Keytext</u> , Scott Foresman's <u>Open Highways</u> . | 1 | 2 | 3 | 4 | 5 |
| 56. Teacher made materials, such as games and skill packets. | 1 | 2 | 3 | 4 | 5 |
| 57. Instructional management systems for teaching skills, such as CTB/McGraw-Hill's <u>Prescriptive Reading Inventory System</u> , Webster International's <u>High Intensity Tutoring Program</u> , Orbit Management System, Random House's <u>High Intensity Learning System</u> . | 1 | 2 | 3 | 4 | 5 |
| 58. Actual texts used in a variety of content areas. | 1 | 2 | 3 | 4 | 5 |
| 59. Reference materials, such as dictionaries, almanacs, and thesauri. | 1 | 2 | 3 | 4 | 5 |
| 60. Television, including VCRs for pre-taping and showing special interest shows, commercially produced video tapes. | 1 | 2 | 3 | 4 | 5 |
| 61. Junior Great Books Series. | 1 | 2 | 3 | 4 | 5 |
| 62. Commercial games for vocabulary/skills reinforcement. | 1 | 2 | 3 | 4 | 5 |
| 63. Comic books. | 1 | 2 | 3 | 4 | 5 |
| 64. Newspaper- and film- making materials. | 1 | 2 | 3 | 4 | 5 |

PART D: Rate the following inservice procedures and topics according to your opinion of their effectiveness for training the teachers who will be assigned to teach the mandated seventh and eighth grade remedial reading courses.

- | | | | | | |
|--|---|---|---|---|---|
| 65. Present sessions on specific approaches/ techniques for teaching reading and study skills, such as language-experience, DRTA, diagnostic/prescriptive, individualized, mastery learning, SQ3R, ReQuest, etc. | 1 | 2 | 3 | 4 | 5 |
| 66. Present sessions on administering and interpreting both formal and informal assessment techniques. | 1 | 2 | 3 | 4 | 5 |

67.	Present sessions on classroom organization which would include grouping, record keeping and classroom management.	1	2	3	4	5
68.	Present sessions on how to effectively use the resources and instructional materials available.	1	2	3	4	5
69.	Present sessions on strategies for working with the disabled reader, such as motivational techniques and recognizing and reaching learning modalities/styles.	1	2	3	4	5
70.	Present sessions on "how to teach" comprehension.	1	2	3	4	5
71.	Conduct inservice after school in 30 - 60 minute blocks of time.	1	2	3	4	5
72.	Training sessions conducted by local, experienced teachers/reading specialists.	1	2	3	4	5
73.	Present "pre-packaged" training series, such as <u>The Right to Read Series</u> , <u>Croft Comprehension In-Service Kit</u> , and the Houghton-Mifflin Inservice Videotapes.	1	2	3	4	5
74.	Visitations to reading classes for observation of effective instruction.	1	2	3	4	5
75.	Provide compensatory time from scheduled inservice for teachers who choose to attend summer, evening, or Saturday training programs presented by the local district, service centers, or by professional conferences.	1	2	3	4	5
76.	Conduct training sessions at the building/campus level.	1	2	3	4	5
77.	Present sessions on the total reading process--how students learn to read--including the skills and sub-skills involved.	1	2	3	4	5
78.	Sharing sessions throughout the year in which teachers exchange effective materials, strategies, schedules, and other practical information.	1	2	3	4	5
79.	Inservice training based on the self-perceived need of the teachers, established through some form of needs assessment.	1	2	3	4	5
80.	Training sessions presented by Education Service Center reading specialists.	1	2	3	4	5

81.	After training sessions, provide follow-up/ feedback in the classroom	1	2	3	4	5
82.	Present sessions on measuring the readability of materials, including how to match learners with materials.	1	2	3	4	5
83.	Schedule training sessions throughout the year.	1	2	3	4	5
84.	Actual teaching demonstrations of how to implement specific strategies and/or materials.	1	2	3	4	5
85.	Training sessions presented by representatives of publishing companies.	1	2	3	4	5
86.	Conduct training sessions at colleges/universities, community facilities, or district conference facilities.	1	2	3	4	5
87.	Conduct inservice on non-teaching days.	1	2	3	4	5
88.	Make-It/Take-It workshops in which teachers actually make instructional materials.	1	2	3	4	5
89.	Attendance by the teachers at professional conferences, such as TAIR (Texas Association for the Improvement of Reading) and state and local IRA (International Reading Association).	1	2	3	4	5
90.	Present sessions on how to teach vocabulary.	1	2	3	4	5
91.	Training sessions presented by college and university reading professors.	1	2	3	4	5
92.	Present sessions on how to use literature in the remedial reading classroom.	1	2	3	4	5
93.	Present sessions on the characteristics of the remedial reader.	1	2	3	4	5
94.	Provide several days of inservice training at the beginning of the school year.	1	2	3	4	5
95.	Present sessions on the process and teaching of writing.	1	2	3	4	5
96.	Cooperative programs between school districts and colleges and universities in which graduate reading courses are presented in a local school.	1	2	3	4	5
97.	Present sessions to familiarize teachers with adolescent literature.	1	2	3	4	5

98. Inservice training based on a teacher evaluation process when principals and/or program directors counsel teachers into needed programs.	1	2	3	4	5
99. Workshops offering "hands-on" activities with materials.	1	2	3	4	5
100. Showing video-tapes of effective instruction.	1	2	3	4	5
101. Conduct inservice in 2-3 hour time blocks.	1	2	3	4	5
102. Present sessions on strategies for teaching more than one instructional level within a single class period.	1	2	3	4	5
103. Present inspirational sessions designed to "motivate" teachers.	1	2	3	4	5
104. Inservice training based on the results of a brief pre-test which diagnoses teacher needs.	1	2	3	4	5

THANK YOU

APPENDIX H

FOLLOW-UP LETTER TO QUESTIONNAIRE II

ARLINGTON INDEPENDENT SCHOOL DISTRICT
1203 WEST PIONEER PARKWAY
ARLINGTON, TEXAS 76013

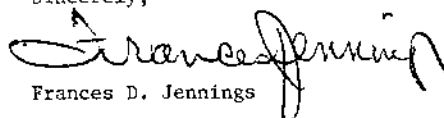
November 15, 1983

Dear Colleague:

Earlier this month you received the second Delphi questionnaire concerning seventh and eighth grade remedial reading courses which are being mandated by House Bill 246. If you have not already done so, will you please complete the questionnaire and return to me?

I will appreciate receiving your completed questionnaire by Monday, November 21, 1983 so that your responses can be included in the final phase of this study.

Sincerely,


Frances D. Jennings

APPENDIX I

LETTER ACCOMPANYING QUESTIONNAIRE III

ARLINGTON INDEPENDENT SCHOOL DISTRICT
1203 WEST PIONEER PARKWAY
ARLINGTON, TEXAS 76013

December 1, 1983

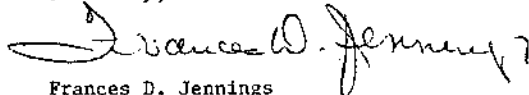
Thank you for returning Questionnaire II of my Delphi study regarding instructional approaches, teaching techniques and materials, and inservice topics and procedures for implementing seventh and eighth grade remedial reading. Your participation has been extremely beneficial. Following the Delphi research method, it is now time for the third and final round of the study.

Questionnaire III provides your previous rating of each recommendation, along with the summarized ratings of the other participants. Its purpose is to ask you to make any changes desired in your ratings, after reviewing these summarized ratings of other reading specialists. This third round is basically a group re-evaluation and refinement process.

Would you please assist me in this final phase of the study? Please complete the questionnaire by Monday, December 12, 1983 and return to me in the enclosed, stamped envelope. I know this is a busy time of the year for you. However, the data collection process needs to be completed before the holidays in order to have the results analyzed and ready for distribution in the late Spring.

Thank you so much for contributing your valuable time and expertise to assist me in completing the study. I wish you a Happy Holiday Season and a Prosperous and Joyful New Year.

Sincerely,



Frances D. Jennings

Enclosures

APPENDIX J

QUESTIONNAIRE III

QUESTIONNAIRE III

NAME: _____

This is the FINAL questionnaire to determine the most effective instructional approaches, teaching techniques and materials, and inservice topics and procedures for implementing seventh and eighth grade remedial reading. It contains the SAME recommendations listed in Questionnaire II, PLUS the summarized results.

The PURPOSE of this questionnaire is to give you the opportunity to make any changes you desire in your rating for each recommendation, after reviewing the summarized results of the other panelists (reading specialists who participated in the study).

The results of the second round were analyzed to determine the MEDIAN and the INTERQUARTILE RANGE (IQR) for each recommendation. The median is the point below which 50 percent of the responses fall. The HIGHER the median value (the closer to 5) for each recommendation, the more effective it was considered by the entire panel. The interquartile range contains the middle 50 percent of the responses. The smaller the interquartile range value, the greater the consensus (how much the panelists agreed on rating the recommendation).

YOUR rating for each recommendation from Questionnaire II has been entered in the first column. Review each of your ratings, consider the median and interquartile range values for each recommendation, and enter your final rating in the next column. You may change the rating at this point or you may repeat the rating you gave on Questionnaire II.

RATE EACH RECOMMENDATION BY WRITING THE NUMBER 1, 2, 3, 4, or 5, according to the following scale:

- 1 = Not Effective
- 2 = Slightly Effective
- 3 = Moderately Effective
- 4 = Highly Effective
- 5 = Extremely Effective

In the last column, please check if you have actually used or observed the use of the recommended technique or procedure.

THANK YOU FOR YOUR ASSISTANCE. YOU WILL RECEIVE AN ABSTRACT AND THE TABULATED FINAL RESULTS OF THE STUDY.

PART A: RATE THE FOLLOWING INSTRUCTIONAL APPROACHES TO TEACHING READING ACCORDING TO YOUR OPINION OF THEIR EFFECTIVENESS FOR SEVENTH AND EIGHTH GRADE REMEDIAL READING INSTRUCTION.

	YOUR FIRST RATING	MEDIAN VALUE	IQR VALUE	YOUR FINAL RATING	USE REC
1. A diagnostic/prescriptive approach in which the instructional plan for each student is based on pre-testing assessment of strengths and weaknesses and subsequent use of a wide variety of materials.	_____	4.34	1.51	_____	_____
2. An individualized, self-paced approach based on student needs and interests which utilizes contracts and teacher-pupil interviews/conferences.	_____	3.37	1.62	_____	_____
3. A language-experience approach in which students dictate and/or write individual or group stories in their natural language that provide a context for studying vocabulary and comprehension.	_____	3.55	1.62	_____	_____
4. A basal reader approach at the appropriate level for the student in which skills are introduced and practiced according to the prescribed scope and sequence of the series.	_____	3.11	1.43	_____	_____
5. An eclectic approach which would utilize a variety of approaches and materials.	_____	4.16	1.51	_____	_____
6. A basal reader approach supported by auxiliary materials from other sources.	_____	3.70	1.53	_____	_____
7. A meaning-centered approach which focuses on the use of content area textbooks to develop efficient reading and study skills.	_____	3.45	1.40	_____	_____
8. A holistic approach utilizing methods of reading that emphasize learning to read by reading, de-emphasizing specific skill sequences.	_____	3.64	2.05	_____	_____
9. A functional approach that centers around mastering reading skills necessary to cope with the reading requirements of everyday life.	_____	3.28	1.29	_____	_____

PART B: RATE THE FOLLOWING TEACHING TECHNIQUES/STRATEGIES ACCORDING TO YOUR OPINION OF THEIR EFFECTIVENESS FOR SEVENTH AND EIGHTH GRADE REMEDIAL READING INSTRUCTION.

	YOUR FIRST RATING	MEDIAN VALUE	IQR VALUE	YOUR FINAL RATING	USE REC
10. Instruction in a systematic method for comprehending content area text, such as SQ3R (Robinson); CONSTRUCT (Vaughn); ReQuest (Manzo).	_____	3.95	1.50	_____	_____
11. Systematic instruction involving guidance, practice, and instructional feedback, such as DRA (Directed Reading Activity) and DRTA (Directed Reading Thinking Activity).	_____	4.38	1.29	_____	_____
12. Individualized, student-selected reading, monitored by teacher conferences for instructional purposes.	_____	3.40	1.90	_____	_____
13. Mastery learning procedures which includes pre-testing to identify sub-skills to be taught, direct instruction, practice, post-testing, and, if necessary for mastery, re-teaching.	_____	3.71	1.78	_____	_____
14. Sustained silent reading to provide practice with student-selected materials.	_____	3.97	1.83	_____	_____
15. Read aloud to students a variety of books for enjoyment and to develop an appreciation of literature and reading.	_____	4.11	1.59	_____	_____
16. Pre-teaching vocabulary.	_____	3.98	1.45	_____	_____
17. Assist students in monitoring their own comprehension processes while reading, making them aware of the skills needed for specific purposes in reading.	_____	4.13	1.41	_____	_____
18. Word recognition taught through the use of phonics.	_____	2.29	1.87	_____	_____
19. Study of thematic book units, such as science-fiction, mythology, folklore, fantasy, mystery...for teaching reading skills.	_____	3.61	1.69	_____	_____
20. Frequent sustained writing of newspapers, diaries, journals, and dialogue.	_____	3.41	1.83	_____	_____

	YOUR FIRST RATING	MEDIAN VALUE	IQR VALUE	YOUR FINAL RATING	USE REC
21. Word recognition/learning taught through a VAKT (visual, auditory, kinesthetic, tactile) approach, such as the Fernald method.		2.60	1.79		
22. Small group instruction based on skill deficiencies.		3.98	1.57		
23. Instruction and practice on a level where students can experience initial success.		4.73	1.00		
24. Cloze procedures to develop the use of context clues/comprehension.		3.92	1.69		
25. Teaching vocabulary in context.		4.58	1.20		
26. Word recognition taught through visual analysis, such as letter discrimination, word discrimination, and configuration.		2.38	1.74		
27. Questioning over instructional materials to assess comprehension.		3.84	1.27		
28. Cloze procedures for determining reading levels and for matching students to reading materials.		3.10	1.62		
29. Word recognition taught through structural analysis, including affixes, root words, and syllables.		3.47	1.47		
30. Questioning to develop higher level thinking skills, as developed by Bloom's Taxonomy.		4.32	1.16		
31. Reading aloud to students for instructional purposes, such as providing a model for oral reading and/or to develop listening skills.		4.15	1.76		
32. Use of peer tutors.		3.52	1.33		
33. Word recognition through flash-card drill.		2.30	1.97		
34. Paired questioning in which students quiz each other over a given passage.		3.02	1.49		
35. Teaching vocabulary through learning the meaning of affixes.		3.00	1.60		

	YOUR FIRST RATING	MEDIAN VALUE	IQR VALUE	YOUR FINAL RATING	USE OF REC.
36. Periodic student-teacher interviews for instruction and evaluation..	_____	3.76	1.65	_____	_____
37. Re-readings of text to improve comprehension.	_____	3.72	1.67	_____	_____
38. Teaching questioning strategies for comprehending text by use of the who, what, why, when, where, and how method.	_____	3.76	1.38	_____	_____
39. Provide teacher tutorial assistance for content area assignments that require effective reading.	_____	3.48	1.22	_____	_____
40. Use diagrams to illustrate the various locations of main ideas in a paragraph, such as the inverted triangle, the triangle, etc.	_____	3.21	1.96	_____	_____
41. Teaching vocabulary through the use of a dictionary.	_____	2.24	2.05	_____	_____
42. Oral reading to improve fluency.	_____	2.81	1.58	_____	_____
43. Choral reading to develop smooth delivery and give students a sense of the flow of oral language.	_____	2.88	1.60	_____	_____
44. Use outlining to teach main idea and supporting details.	_____	3.37	1.53	_____	_____
45. Neurological Impress technique in which the teacher sits slightly behind the student, orally reads the text while pointing to the part of the text being read, and the student attempts to read along as quickly and accurately as possible.	_____	2.10	1.52	_____	_____

PART C: RATE THE FOLLOWING MATERIALS ACCORDING TO YOUR OPINION OF THEIR EFFECTIVENESS FOR SEVENTH AND EIGHTH GRADE REMEDIAL READING INSTRUCTION.

	YOUR FIRST RATING	MEDIAN VALUE	IQR VALUE	YOUR FINAL RATING	USE OF REC.
46. Workbook series for developing specific skills, such as the Barnell-Loft, Scholastic, Modern Curriculum Press, Random House, and Jamestown publications.	_____	3.48	1.34	_____	_____

	YOUR FIRST RATING	MEDIAN VALUE	IQR VALUE	YOUR FINAL RATING	USE OF REC.
47. Book kits for developing comprehension, such as the <u>Jamestown Classics</u> , <u>Random House Reading Series</u> , <u>Scholastic's Project Achievement: Reading and Sprint</u> , <u>Reader's Digest's Counterpoint</u> and <u>Triple Takes</u> .		3.47	1.13		
48. Reading kits for individual, self-paced instruction in skills and comprehension, such as the SRA, BFA, and Bomar kits.		3.10	1.26		
49. Machines with accompanying materials for teaching reading skills, such as the controlled reader, Combo 8, tach-x, language master, Systems 80, Hoffman.		2.78	1.71		
50. State adopted basal reading series, including the accompanying support materials.		3.21	1.65		
51. A wide variety of books for instruction and independent reading, including paperback libraries, high-interest/low vocabulary books, memorable literature.		4.64	1.03		
52. Audio equipment with accompanying materials for listening centers and/or whole group instruction.		3.58	1.47		
53. Newspapers, magazines, and life skills materials, such as menus, forms, etc.		4.16	1.49		
54. Microcomputers with software for drill and practice and tutorials.		3.50	1.65		
55. Supplementary reading series designed for below level readers, such as Houghton-Mifflin's <u>Vistas</u> , Harcourt Brace Jovanovich's <u>Rally!</u> , Economy's <u>Keytext</u> , Scott Foresman's <u>Open Highways</u> .		3.34	1.47		
56. Teacher made materials, such as games and skill packets.		3.43	1.29		
57. Instructional management systems for teaching skills, such as CTB McGraw-Hill's <u>Prescriptive Reading Inventory System</u> , Webster International's <u>High Intensity Tutoring Program</u> , Orbit Management System, Random House's <u>High Intensity Learning System</u> .		3.17	1.52		

	YOUR FIRST RATING	MEDIAN VALUE	IQR VALUE	YOUR FINAL RATING	USE OF REC.
58. Actual texts used in a variety of content courses.	_____	3.47	1.43	_____	_____
59. Reference materials, such as dictionaries, almanacs, and thesauri.	_____	3.61	1.56	_____	_____
60. Television, including VCRs for pre-taping and showing special interest shows, commercially produced video tapes.	_____	3.13	1.66	_____	_____
61. Junior Great Books Series.	_____	2.94	1.77	_____	_____
62. Commercial games for vocabulary/skills reinforcement.	_____	2.94	1.20	_____	_____
63. Comic books.	_____	2.98	1.07	_____	_____
64. Newspaper- and film-making materials.	_____	3.13	1.20	_____	_____

PART D: RATE THE FOLLOWING INSERVICE PROCEDURES AND TOPICS ACCORDING TO YOUR OPINION OF THEIR EFFECTIVENESS FOR TRAINING THE TEACHERS WHO WILL BE ASSIGNED TO TEACH THE MANDATED SEVENTH AND EIGHTH GRADE REMEDIAL READING COURSES.

	YOUR FIRST RATING	MEDIAN VALUE	IQR VALUE	YOUR FINAL RATING	USE OF REC.
65. Present sessions on specific approaches/ techniques for teaching reading and study skills, such as language-experience, DRTA, diagnostic/prescriptive, individualized, mastery learning, SQ3R, ReQuest, etc.	_____	4.50	1.21	_____	_____
66. Present sessions on administering and interpreting both formal and informal assessment techniques.	_____	4.19	1.51	_____	_____
67. Present sessions on classroom organization which would include grouping, record keeping, and classroom management.	_____	4.18	1.41	_____	_____
68. Present sessions on how to effectively use the resources and instructional materials available.	_____	4.22	1.38	_____	_____
69. Present sessions on strategies for working with the disabled reader, such as motivational techniques and recognizing and reaching learning modalities/styles.	_____	4.34	1.29	_____	_____

	YOUR FIRST RATING	MEDIAN VALUE	IQR VALUE	YOUR FINAL RATING	USE OF REC.
70. Present sessions on "how to teach" comprehension.	_____	4.71	1.12	_____	_____
71. Conduct inservice after school in 30-60 minute blocks of time.	_____	2.54	2.18	_____	_____
72. Training sessions conducted by local, experienced teachers/reading specialists.	_____	4.16	1.41	_____	_____
73. Present "pre-packaged" training series, such as <u>The Right to Read Series</u> , <u>Croft Comprehension In-Service Kits</u> , and the <u>Houghton-Mifflin Inservice Videotapes</u> .	_____	2.61	1.57	_____	_____
74. Visitations to reading classes for observation of effective instruction.	_____	4.13	1.22	_____	_____
75. Provide compensatory time from scheduled inservice for teachers who choose to attend summer, evening, or Saturday training programs presented by the local district, service centers, or by professional conferences.	_____	4.71	1.08	_____	_____
76. Conduct training sessions at the building/campus level.	_____	4.18	1.42	_____	_____
77. Present sessions on the total reading process--how students learn to read--including the skills and sub-skills involved.	_____	4.13	1.21	_____	_____
78. Sharing sessions throughout the year in which teachers exchange effective materials, strategies, schedules, and other practical information.	_____	4.45	1.19	_____	_____
79. Inservice training based on the self-perceived need of the teachers, established through some form of needs assessment.	_____	4.35	1.15	_____	_____
80. Training sessions presented by Education Service Center reading specialists.	_____	3.70	1.55	_____	_____
81. After training sessions, provide follow-up/feedback in the classroom.	_____	4.60	1.07	_____	_____
82. Present sessions on measuring the readability of materials, including how to match learners with materials.	_____	3.57	1.49	_____	_____

	YOUR FIRST RATING	MEDIAN VALUE	IQR VALUE	YOUR FINAL RATING	USE OF REC.
83. Schedule training sessions throughout the year.		4.19	1.28		
84. Actual teaching demonstrations of how to implement specific strategies and/or materials.		4.63	1.02		
85. Training sessions presented by representatives of publishing companies.		2.50	1.64		
86. Conduct training sessions at colleges/universities, community facilities, or district conference facilities.		3.35	1.48		
87. Conduct inservice on non-teaching days.		4.11	1.01		
88. Make-It/Take-It workshops in which teachers actually make instructional materials.		3.67	1.48		
89. Attendance by the teachers at professional conferences, such as TAIR (Texas Association for the Improvement of Reading) and state and local IRA (International Reading Association).		4.07	1.31		
90. Present sessions on how to teach vocabulary.		3.95	1.57		
91. Training sessions presented by college and university reading professors.		3.36	1.49		
92. Present sessions on how to use literature in the remedial reading classroom.		4.00	1.44		
93. Present sessions on the characteristics of the remedial reader.		3.47	1.52		
94. Provide several days of inservice training at the beginning of the school year.		3.85	1.30		
95. Present sessions on the process and teaching of writing.		4.15	1.37		
96. Cooperative programs between school districts and colleges and universities in which graduate reading courses are presented in a local school.		3.96	1.22		

	YOUR FIRST RATING	MEDIAN VALUE	IQR VALUE	YOUR FINAL RATING	USE OF REC.
97. Present sessions to familiarize teachers with adolescent literature.	_____	<u>3.96</u>	<u>1.38</u>	_____	_____
98. Inservice training based on a teacher evaluation process when principals and/or programs directors counsel teachers into needed programs.	_____	<u>3.50</u>	<u>1.60</u>	_____	_____
99. Workshops offering "hands-on" activities with materials.	_____	<u>4.07</u>	<u>1.17</u>	_____	_____
100. Showing video-tapes of effective instruction.	_____	<u>3.56</u>	<u>1.22</u>	_____	_____
101. Conduct inservice in 2-3 hour time blocks.	_____	<u>3.66</u>	<u>1.22</u>	_____	_____
102. Present sessions on strategies for teaching more than one instructional level within a single class period.	_____	<u>4.42</u>	<u>1.27</u>	_____	_____
103. Present inspirational sessions designed to "motivate" teachers.	_____	<u>3.74</u>	<u>1.59</u>	_____	_____
104. Inservice training based on the results of a brief pre-test which diagnoses teacher needs.	_____	<u>3.81</u>	<u>1.91</u>	_____	_____

THANK YOU!!

APPENDIX K

FOLLOW-UP LETTER TO QUESTIONNAIRE III

ARLINGTON INDEPENDENT SCHOOL DISTRICT
1203 WEST PIONEER PARKWAY
ARLINGTON, TEXAS 76013

December 9, 1983

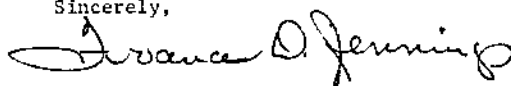
Dear Colleague:

Last week you received the third and final Delphi questionnaire concerning seventh and eight grade remedial reading courses which are being mandated by House Bill 246. If you have not already done so, will you please complete the questionnaire and return to me as soon as possible?

I need to receive your completed questionnaire no later than Friday, December 16, 1983 so that your responses can be included in the final phase of this study. It is extremely important to the outcome of the study to have each participant of Round II also respond to Round III.

Thank you again for the time and expertise you have given to this study.

Sincerely,



Frances D. Jennings

APPENDIX L


VALIDATION PANEL

We, the undersigned, met on the 23rd day of October, 1983, and reviewed the information received from Round One of the Delphi study being conducted by Frances D. Jennings. We studied the rating scale developed from that information and assisted with revisions.


We verify that the scale was based solely upon information received on Questionnaire I and does not reflect the personal preferences of the experimenter.



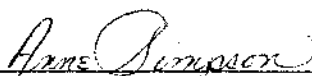
Dr. Joe Cortina



Dr. Lynda Melton



Dr. Anna Durham



Dr. Anne Simpson



Dr. Ruth Berrier

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