To the Graduate Council:

I am submitting herewith a dissertation written by Suellen Alfred entitled "An Interview Study Analysis of the Study Skills and Independent Learning Strategies of Selected Secondary Homebound Students in a County School System in East Tennessee." I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Education, with a major in Curriculum and Instruction.

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We have read this dissertation
and recommend its acceptance:

Accepted for the Council:

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AN INTERVIEW STUDY ANALYSIS OF THE STUDY SKILLS AND INDEPENDENT LEARNING STRATEGIES OF SELECTED SECONDARY HOMEBOUND STUDENTS IN A COUNTY SCHOOL SYSTEM IN EAST TENNESSEE

A Dissertation

Presented for the

Doctor of Education

Degree

The University of Tennessee, Knoxville

Suellen Alfred

May, 1991

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DEDICATION

This work is dedicated with love to Freeda Murray Alfred, my mother. She quoted Longfellow, and I finally listened:

Let us then be up and doing
With a heart for any fate;
Still achieving, still pursuing,
Learn to labor and to wait.

She was my very first teacher.

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ABSTRACT

While the research on the use of study skills in public schools has grown considerably over the last several decades, the research in homebound students' use of study skills is meager. Yet these students have a great need for study strategies that will help them comprehend their reading assignments while they are home alone without the benefit of classroom interaction. The key questions of the study were what study skills do homebound students say they use and what study skills do homebound teachers say they use with their students? To answer those questions the writer interviewed ten homebound students in a school system in East Tennessee who were either receiving homebound instruction at the time of the interview or had been given homebound instruction during the school year 1989-90.

The writer also sent a questionnaire to the homebound teachers in the county in which students were enrolled and to homebound teachers in seven surrounding counties. The questionnaire asked them to indicate how often they used certain study skills with their homebound students.

An analysis of the interviews showed that homebound students said they used a variety of study skills to accomplish the purposes of understanding the material, meeting teacher expectations, doing well on tests, ultimately finishing high school. Among the most frequently mentioned study skills were (1) previewing; (2) predicting;

(3) answering adjunct, chapter, teacher-made, and self-questions; (4) notetaking which consisted primarily of summarizing, paraphrasing, and outlining; (5) and vocabulary study. An analysis of the questionnaire showed that homebound teachers indicated that at least sometimes they used the following study skills: vocabulary study, chapter questions, summaries, graphic aids, study guides, structured overviews, SQ3R, outlining, skimming or scanning, oral recitation, notetaking, students checking their own progress, semantic mapping.

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CHAPTER I

INTRODUCTION

Introduction

While much research has been done on study skills in general, very little research has been done regarding the use of study skills with homebound students. In fact, research on homebound students is sparse. Judith Longo (1986) describes a Telecollege Program for Confined Adults by which homebound college students can access instruction in the regular class through a conference telephone hookup (Longo, 1986). The Phoenix Union High School District also reports using telephone lines and television and/or radio broadcasts or both as adjuncts for their homebound students (1986). In its resource manual for homebound teachers, the State Department of Education in Florida (1985) stresses the importance of using appropriate materials with homebound students. However, these resources and others neglect to address specifically the use of study skills among homebound students. Such a dearth of research leaves a gap in scholars' knowledge about the kind of instruction that homebound students are receiving.

In many cases, homebound students receive only a few hours of direct instruction per week while they are at home or in the hospital. For example, the Special Education

Student Evaluation Manual for the state of Tennessee (Division of Special Programs, 1985) states that homebound students "are generally seen twice a week for an hour and a half each visit." The manual goes on to state,

> the time need not be limited to three hours . . . the three-hour weekly requirement is to count those students in the school system's average daily attendance (Division of Special Programs, 1985, pp. 9,20).

However, the State of Tennessee Rules, Regulations and Minimum Standards for the Governance of Public Schools in the State of Tennessee, Book One states that no more than three hours of "direct instruction per week shall be reported (italics added) for any one eligible child" (State of Tennessee, 1986, p. 76). In other words, regardless of how many hours of instruction are given to a homebound student, the school system will receive funding for only three hours per week.

For pregnant students, the Tennessee Code Annotated, 1990 mandates that "each local education agency shall offer each pregnant student three (3) hours of homebound instruction per week throughout a six-weeks' period of maternity leave" (Homebound Instruction for Pregnant Students, Tennessee Code Ann. # 49-10-1101, 1990, p. 501). The law further mandates that "each local education agency shall be entitled to reimbursement from the state for

providing homebound services. . . . not to exceed three (3) hours of weekly instruction" (TCA 40-10-1102, 1990, Reimbursement by State, p. 501). For the school year 1989 - 90, that rate for teaching pregnant students was $14.65 per hour taught (Hamblen County, 1990). Unlike the program for pregnant students, the funding of the regular homebound program is based not on the number of hours a student is taught per week, but on the average number of homebound students on the roll on the first day of four specific months of the school year: October, December, February, and May. Funding for those students is determined by a complicated formula. For example, in the county in which the homebound students in this study are enrolled, the formula yielded a total of $2,592 per homebound student for the fiscal year 1989 - 90, regardless of how many hours per week they were taught (Hamblen County, 1990). Thus, departments of Special Services in local school systems in Tennessee are given no financial incentives to instruct homebound students for more than the minimum requirement of three hours per week.

There is evidence that a number of homebound programs across the country make use of telecommunications linking the homebound student with the regular classroom (Barresi, Bunte, Mack, 1980; Phoenix, 1981; Longo, 1986). However, through informal telephone interviews with special services people in selected East Tennessee county school systems,

this writer found no evidence of such programs. This information leads one to assume that school systems in East Tennessee are not going beyond state minimum requirements and that homebound students in East Tennessee are receiving only three hours of instruction per week at home, away from any kind of interaction with classmates or regular classroom teachers. Certainly, there is no research that proves whether homebound students can or cannot succeed with only three hours of instruction. That question is beyond the confines of this study. However, the literature does suggest that study skills enhance student learning (Bird, 1931; Robinson, 1941). Thus, it is justifiable to assume that the use of such skills is appropriate for homebound students who may well be in need of independent learning strategies that a knowledge of study skills can provide.

The Problem/The Questions

Given the lack of incentives for school systems to teach homebound students for more than three hours a week, one is left with several important questions:

1. How do homebound students describe their use of study skills to complete their assignments with a minimum amount of instruction and assistance from a teacher and with virtually no contact with classmates in regular classroom interaction?

2. In an effort to help their students become

independent learners, how often do homebound teachers say they teach study skills to their students?

On the question of the use of study skills by homebound students and homebound teachers, this writer has found no research addressing this question. On the question of the use of study skills by teachers in general, studies show that they often do not teach study skills and, furthermore, are ill-informed about them. As Tonjes and Zintz (1987) state

> Study strategies . . . are rarely taught directly throughout the grades as a part of the regular curriculum; or, if introduced in one class, the strategies are not consistently followed up in the next one (p. 210).

Askov, Kamm and Klumb found that sixth-grade elementary teachers did not have a rudimentary knowledge of the use of basic study strategies (Askov, Kamm, and Klumb, 1977). With regard to secondary teachers, Robert Karlin found high school students stating that their teachers had not taught them study skills (Karlin, 1972). Given the facts outlined above, the present examination of homebound students' use of study skills contributes to the literature that looks at the use of study skills to assist instruction.

The Purpose

The purpose of the present study is to show

1. what kinds of study skills selected secondary homebound students (grades nine through twelve) say they use while they are at home or in the hospital during times when they do not have the direct instruction of the teacher;

2. how often selected homebound teachers say they use certain study skills with their homebound students.

Methods/Procedure/Organization

The study is a descriptive interview study using two main research tools:

1. audio-taped open-ended interviews with ten selected high school homebound students (grades nine through twelve) and their parents from a single county school system with a large rural population in East Tennessee (total secondary school enrollment for the school year 1989 -1990 was 2879);

2. a written survey of homebound teachers from the school system in which the students are enrolled and from seven selected county school systems in close proximity to that system. (Based on information from the State of Tennessee's Directory of Public Schools, the average secondary enrollment among all counties for the year 1989 - 1990 was 2037.) (See the attached appendixes for the kinds of questions addressed in the interviews and the survey.)

The writer conducted and recorded the interviews with

an audio cassette recorder. The taped interviews were transcribed, and the writer analyzed the transcriptions using the analysis process described by Grant McCracken (1988) and by Goetz and LeCompte (1984).

The written survey was sent to 25 homebound teachers in seven East Tennessee rural counties, including the county in which the students were enrolled in homebound instruction. The return rate was 80 per cent. The answers that homebound teachers checked on the survey were tallied and analyzed to determine if they indicated the teaching of study skills to homebound students.

Need for the Study

Graham and Robinson observe that the primary goal of education should be "to teach students how to learn on their own" (Graham and Robinson, 1989, p. ix.). From a legal standpoint, that opportunity must not be hindered by a student's physical impairment (Georgia, 1981, p. v.). Yet, in many states like Tennessee (State of Tennessee, 1986), Florida (1985), Georgia (1981), Louisiana (1981), and Arizona (Phoenix, 1981), to name a few, students who are placed on homebound instruction because of injury, illness or other extenuating circumstances are not given as much instructional time as their classmates in the regular program. As has been mentioned above, while the sense of the body of literature leads to the conclusion that more hours

of instruction are better than fewer, this writer has found no research to corroborate whether homebound students succeed or fail based on limited instruction time. Thus, the question remains, are homebound students taught how to study effectively without the benefit of direct instruction? Up until now, this question has remained unanswered, leaving a gap in the knowledge of scholars in the field of instruction. That gap can be bridged by the present study which provides at least a partial answer from a limited group of students and teachers.

Such a study provides insight in the fields of study skills research and homebound instruction. A knowledge of the kinds of study skills and strategies that high school homebound students are either taught or devise on their own is valuable information for those who wish to design effective teaching/learning methods not only for homebound students but for all students who have a need to become independent learners.

Assumptions

In addition to the implicit assumptions that all students deserve an opportunity for a good education and that more than three hours of instruction time for students is better than only three hours, the writer approached this study with certain additional basic assumptions:

1. Homebound students are as important as their peers

in the regular program.

2. Students and parents who were interviewed told the truth about the study skills and strategies used.

3. Homebound teachers provided accurate information in the survey.

4. Descriptive studies confined to a relatively small group have value.

Other researchers may wish to substantiate such assumptions with further research of a more experimental nature. Certainly, the present study can be a springboard for such future endeavors.

Limitations

The study was restricted to an interview study of ten students from the population of high school students who were enrolled in homebound instruction during the school year 1989-90, in a county school system in East Tennessee. Limiting the study to ten students allowed the writer to concentrate on an in-depth analysis of the students' recorded responses. Janet Emig's study of the composing process of only eight high school seniors yielded much insight into the way those students approached the task of expressing themselves on paper (Emig, 1971). On the value of descriptive studies, Braddock, Lloyd-Jones, and Schoer state

> Individual differences may "cancel out" in studies using the mean as the measure of the group. . . .

> much may be gained by developing case study procedures against a background of experimental group research. . . (1971, pp. 31 - 32).

The students in the study were selected randomly. However, one student in the initial random list had moved from the area, and another student was chosen randomly in his place. The writer determined not to use any unsuitable students in the study. Students considered unsuitable were those who, in the estimation of the writer, had displayed one or more of the following characteristics:

1. inability to articulate their ideas with ease;
2. lack of desire to participate in the study;
3. history of uncooperative behavior manifested by:
   - failure to remain at home for lessons
   - failure to follow health professionals' orders
   - failure to make an effort to complete assignments
   - resistance to correction.

One unsuitable student's name emerged from the randomly chosen list, and another name was randomly chosen.

Delimitations

As stated above, the study involved ten selected high school homebound students, grades nine through twelve and their parent(s) from a school system in a mostly rural East Tennessee County. All of the students in the study

were homebound students of the writer. None was a student of the writer in the regular classroom. Thus, the entire homebound student population of the system was not interviewed. The study involved only homebound teachers from the school system in which the students were enrolled and from the selected East Tennessee rural county school systems surrounding that system. The study was confined to interviewing the parents and students and to surveying via mail the homebound teachers. No pre-tests, treatments, or post-tests were involved.

Definition of Terms

> The term "homebound student" is defined as a student with a physical handicap which, in the opinion of professional personnel licensed by the Board of Healing Arts, will cause him [or her] to be absent from school for more than two consecutive weeks; . . . who has been certified by an appropriate specialist as having a handicapping condition (Division of Special Programs, 1985, p. 9.19).

which makes homebound instruction appropriate for the student.

The term "study skills" is defined as "strategies we use when our purpose is to do something with the content we have read" (N. Smith, 1959). (For additional definitions, see Appendix C.) McMurry (1909) says that the term "study" indicates that which is necessary for the assimilation of ideas (p. xiii). Graham and Robinson (1989) observe that

> Study skills are specific abilities which students may use alone or in combination to learn the content of the curriculum on their own. These abilities are rooted in the reading process. A set of study skills used to solve a problem (like writing a report or taking a test) is a strategy (p. 3).

Echoing Graham and Robinson, Gall, Gall, Jacobsen, and Bullock (1990) differentiate between "study skills" and "study strategy." A study skill

> refers to just one aspect of a study process, whereas a study strategy refers to the total study process. For example, writing a school paper requires the use of many study skills (p. 10).

In his definition of study skills Karlin (1972) includes all word-recognition skills, meaning skills, locating, selecting and evaluating information, understanding graphic aids, following directions, developing reading flexibility, and using independent learning skills (p. 186).

It is important to note how each of these definitions contains reference to independent study. As Herber and Nelson-Herber state, ". . . students should not be expected to become independent learners independently. They should be shown how to become independent" (p. 584).

Specific study skills examined in the study are those identified on the questionnaire to be sent to homebound teachers and the skills that students say they use in the in the interview. (See Appendixes.)

Summary and Preview

In this first chapter, the writer has explained the problem, purpose and need for a dissertation on study skills used by homebound students and homebound teachers. In the following chapters, the writer will elaborate further. Chapter II contains a review of related literature in the areas of homebound instruction and study skills. In Chapter III, the writer will explain the procedures used in the study. Chapter IV contains a description and discussion of the categories and themes that arose in an examination of the interview transcripts. It also contains a description and discussion of the homebound teachers' questionnaire. Chapter V is comprised of a summary, conclusions, and recommendations.

CHAPTER II

REVIEW OF RELATED LITERATURE

Homebound/Hospitalized Students

As has been stated previously, little research has been done on the instructional strategies of homebound or hospitalized students. A search of the data bases of both Educational Resource Information Center and the Exceptional Child Education Resources from 1975 through 1990 shows no studies that address study skills as they are used with and by homebound students. Also, a search of Dissertation Abstracts International yielded meager results.

Because they are handicapped, homebound students generally fall under the umbrella of special education or special services. Many state departments of education like those of Florida (1983) and Georgia (1981) have resource manuals designed "to help . . .teachers of homebound or hospitalized children cope with the unusual demands of the position" (Florida, 1983, p. 2). Therefore, most research on homebound students is found in documents that deal with the history, regulations, policy, and/or programs of homebound instruction. For example, Mary McKnight Taylor (1975) describes a New York City summer program for such children, 92 per cent of whom mastered at least one objective of the program. Barresi, Bunte and Mack describe homebound instruction programs offered by different states.

(Barresi, Bunte and Mack, 1980, p. 7).

According to the State of Florida Department of Education, "The first Homebound educational service began in Newton, Iowa, in 1939, using the telephone as the teaching medium" (State of Florida, 1985, p. 2). Since that time, according to Barresi, Bunte, and Mack (1980) homebound services for students in all states, many of which have some sort of telecommunication system, have become a standard part of special services for students in need of them. They also state that the setting for homebound/hospital services "may be the child's home, a hospital, a sanitarium, or a convalescent home" (p. 7). Officials of the Duvall County School District in Jacksonville, Florida, regard their homebound and hospitalized program as "a delivery system rather than a program," the goal of which "is to provide the bridge needed for the students to continue their school program when they are medically able" (Duvall County Schools, 1985, p. 11).

The methods for delivering homebound services to students varies from state to state. The Duvall County School District pioneered the use of the teleclass system in Florida. In such a system, several students are able to participate in one lesson via a telephone hookup with one teacher. "Combined with home visits, this method has improved the quality of specialized instruction" (Duvall County, p.12). Homebound students in the Phoenix Union High

School District "who have access to a telephone and are physically and mentally able can participate in one or more Tele-classes," (p. 3) which are conducted by the homebound teacher. Their Tele-class is also supplemented by regular visits of the homebound teacher to the hospital or to the home where the student may be confined. Judith Longo describes a Telecollege Program for Confined Adults by which homebound college students can access instruction in the regular class through a conference telephone hookup (Longo, 1986). Though telecommunication is standard in a number of states, informal interviews by the writer with special services officials in selected East Tennessee counties, showed no evidence of such programs in those counties (Alfred, 1990).

According to the Barresi, Bunte, and Mack (1980), in most states, eligibility for service is generally determined by a medical or physical condition which prevents the student from physically attending school even with support equipment or support personnel. This determination is made by a physician or a certified member of the healing arts profession. "Most states require that the student be unable to attend school for a certain period of time" (p. 7). In the case of Tennessee that "certain period of time" is "more than two consecutive weeks" (Division of Special Program, 1985, p. 9.19). The time period in other states varies from one to four weeks (Barresi, Bunte and Mack). Methods of

providing homebound instruction vary from state to state.

Duke emphasizes that most homebound students will not be in the homebound program for any length of time, but will, for the most part, return to the regular classroom when their illnesses or injuries have healed. In regard to returning to the regular classroom after homebound instruction, this writer did not find a single study addressing the academic progress of those students. However, Mona Maarse-Delahooke does find that the academic achievement of children taught at home in a home schooling situation is similar to the achievement of children educated in the regular classrooms of two private schools. (Maarse-Delahooke, 1986) A similar finding for homebound students is shown in the present study which is discussed below.

While the research on methods of instruction used with homebound is thin, a few studies touch on the subject. Anita Dorf's study of the teaching styles of hospital based educators found that teachers with the bachelor's degree in education preferred teacher-structured learning more than teachers with the bachelor's degree in nursing. Teachers with the PhD. preferred individual learning more than did teachers with the master's degree in education (Dorf, 1985). These findings are especially interesting because it stands to reason that a teacher's preferred teaching style would impact directly on the method he/she chose to use with homebound or hospitalized students. Certainly, such a

preference could determine the extent to which a teacher would attempt to help homebound students become independent learners.

Because homebound students fall under the umbrella of special education or special services, many school districts require that each homebound student be provided with an individual educational program, a document that outlines the outcomes of instruction but does not always delineate the methods by which those outcomes will be achieved (Duke, 1980). Karlene Duke stresses that in developing individual educational programs for homebound students, teachers should consider the fact that these students are ill or injured and may only be able to complete a limited number of assignments in a given amount of time. Also, Duke asserts that because the students will return to the regular classroom, elaborate individual educational programs for these students are not necessary. While she does address the development of the "IEP" for homebound students, Duke does not discuss study skills instruction.

One study method is mentioned in Florida's manual for homebound teachers. In that manual the State of Florida Department of Education provides some guidelines for instruction; however, most of the information in the document refers primarily to instructional environment, scheduling, testing, and socialization problems of homebound students. The manual mentions specific study strategies

only once:

> Students will be given homework between scheduled visits [by the teacher]. If the student is unable to complete the assignment because of poor study habits, the teacher should request the student to maintain a chart indicating the amount of time utilized in study and class preparation between instruction periods (p.6).

While they do not address study skills as they apply specifically to homebound students, Graham and Robinson (1989) do discuss the fact that the state of the student's general health may impact on his/her learning. They suggest that teachers observe students carefully; they assert, "It would be unprofessional to ignore the reality of special physical or psychological needs" (p. 11). Tonjes and Zintz (1987) also mention the fact that poor health, fatigue, and personal problems can interfere with effective studying. They recommend advising students that

> it is possible to study in spite of these problems if they are willing to persevere. When they are tired, suggest that they take short breaks . . . Study can actually be a temporary escape from pressing problems (p. 245).

In regard to homebound teachers and students in general, the Phoenix Union High School District in Arizona completed a report entitled Homebound Program: 1980 - 81 which explored a number of aspects about homebound

instruction. While the report contains no specific information about study skills used with homebound students, it does contain a survey of homebound students who were on homebound during the first semester of the 1980 - 1981 school year.

Clearly, it is beyond the confines of this discussion to analyze thoroughly the statements by homebound teachers of Phoenix; however, the results do tell the reader something about the kind of instruction and communication that are inherent in at least one homebound program. These results will be discussed further in this study in comparison to the writer's own findings from homebound teachers.

The sources mentioned above represent the lion's share of the research on homebound located by the writer. Clearly, homebound instruction is a fertile field for further examination and analysis.

Study Skills

While the research on homebound instruction is sparse, the research on study skills has become plentiful in the last several decades. Perhaps "study strategies" is a better term in that "study skills are actually procedures or strategies by which students consciously direct their academic performances" (Lamberg & Lamb, 1980, p.88). However, the writer will use the term "study skills" since

it is the more widely used of the two terms.

In 1909, F. M. McMurry in How to Study and Teaching How to Study recognized the need to teach students how to study. He observed that before his book, only two works had addressed the topic. In More Effective Study (1931), designed to improve the study habits of college students, Bird emphasized self-recitation, varying the reading rate, using the library, writing textbook notes, underlining and outlining (Bird, 1931). In a 1941 work entitled Diagnostic and Remedial Techniques for Effective Study, Francis P. Robinson devised the SQ3R (Survey, Question, Read, Recite, Review) method that has been used widely by those who teach study skills. In the 1946 edition of that work, bearing the shortened title, Effective Study, Robinson wrote:

> Whereas how-to-study work once traditionally emphasized helping or "saving" the poor student, it is now of value to all students since even good students do not have efficient techniques (p. 8).

During the 1950's and 1960's, a study funded by Carnegie Corporation of New York and Harvard University found that study skills and critical reading in content areas were either ignored or covered superficially in undergraduate education (Dishner and Olson, 1989). Out of that study arose two noteworthy recommendations: (1) basic reading instruction for elementary teacher should include "content and instructional techniques appropriate for

intermediate and upper grades"; (2) "a course in basic reading instruction be required of all prospective secondary school teachers" (Austin and Morrison, 1961, pp. 145, 147). By 1986, thirty-one states had developed requirements in reading for students in secondary education (Farrell and Cirrincione, J. M., 1986).

In 1958, Philip Shaw drew attention to text types, which some call organizational patterns (Herber, 1970), and emphasized the importance of directly teaching those text types. Harold Herber (1970) emphasized organizational patterns and discussed the need to use them in teaching comprehension.

Harold Herber also identified "assumptive teaching" of which he stated,

> . . . the teacher assumes students already have the skills and already know the concepts he is supposed to teach them. If he were not making assumptions, he would show them <u>how</u> to study; <u>how</u> to develop and use concepts. . . . The alternative, obviously, is to have teachers present carefully structured lessons which develop both the concepts and the skills essential to the course (p. 26).

To address the problem of assumptive teaching, Herber wrote <u>Teaching Reading in the Content Areas</u>, in which he emphasized the importance of showing "students how to be successful in doing what is required of them" (p. 26).

Since Herber's book, research in the field of study

skills has grown considerably, so that one finds a number of textbooks designed for teachers and students, particularly those in secondary school and college. For example, Roe, Stoodt, and Burns (1987) discuss a number of study skills which they divide into study methods, organizational skills, location skills, graphic aids, and adjusting the reading rate depending on one's purpose. Other books such as those written by Vacca and Vacca (1989), Santeusanio (1983), Daines (1982), and Lapp, Flood, and Farnan (1989) are available for those who teach reading in the content areas in general and study skills in particular. (See Appendix C for definitions of study skills that will be used in this study.)

In How to Study in College (1989), Walter Pauk advocates study techniques that have "worked for thousands of students during the last thirty-five years" (xiii). Among the skills that Pauk addresses are note taking, thinking visually (with graphs and conceptual maps), and improving vocabulary. Thus, there are many resources available for the homebound teachers who wish to teach study skills.

For the purpose of the present study, it is appropriate to examine representative literature on the following study skills: metacognitive self-questioning, notetaking, paraphrasing, summarizing, outlining, graphic organizers, graphic aids, vocabulary study, study guides, comprehension

questions, skimming, and scanning. It is beyond the confines of this study to present an exhaustive literature review of each of the study skills, but an examination of a number of studies on each skill will provide a sufficient overview for the purposes of this dissertation.

Metacognition/Self-questioning

J. H. Flavell (1976) defines metacognition as monitoring and regulating one's own cognitive processes and products (p. 232). Brown (1978) states

> the processes described as metacognitive are the important aspects of knowledge, that what is of major interest is knowledge about one's own cognitions rather than the cognitions themselves (p. 79).

Brown further notes the similarity between metacognition and study skills. Lindquist-Sandmann (1987) simply calls metacognitive processes "the 'how' behind getting meaning from print" (p. 331).

Self-questioning is a key strategy in metacognition. However, Gillespie maintains that students must be taught to "generate their own questions" (1990, p. 250). She further implies that such a skill is unlikely to occur unless it is taught (p. 256). Such questions would include, "What is the main idea of this paragraph? Is there anything I do not understand in this paragraph?" (Roe, Stoodt, & Burns, p.

102). Other questions might include:

> How much do I know about this topic? What do I expect to find out about this topic?. . .do I see any words or phrases that signal any particular organizational pattern? . . .What can I do if I still have not determined the author's intended message? (Jacobowitz, 1990, p. 622)

Andre and Anderson (1979) found that students trained in self-questioning scored higher on criterion referenced tests than students who simply read and re-read. In their experiment, one group of high school seniors were trained to construct both main idea questions and detail questions as they read and to answer them. A second group was simply asked to write questions as they read. A third group was asked simply to read and to reread. While the group trained in question construction made the highest scores on the post test, even the group who generated questions without training scored higher than the group that simply read and reread. The authors of the study discussed three explanations for these results. One deals with "the levels-of-processing notion of cognitive psychology" (p. 619).

> According to this theory, input is analyzed in a hierarchy of processing stages where increasing "depth" implies a greater degree of semantic or cognitive analysis and hence greater retention (p. 619).

A second reason for the greater effectiveness of self-

questions compared to the read-reread group has to do with more time spent with the text. "On average, about twice as much time was spend questioning than rereading" (p.619). Finally, the authors suggest that

> self generating of questions may be an effective reading strategy because the student is forced to a) pause frequently, b) deal with an "understanding question," c) determine whether or not comprehension has occurred, and d) decide what strategic action should be taken next. The process of self-awareness and conscious control of the study activity is an illustration of the metacognitive aspect involved in the self-questioning strategy (p. 620).

Vacca and Vacca (1989) state that "Metacognitive discussions should center on the notion that an author and a reader interact with one another" (p.196). They propose a metacognitive framework of instruction which "combines explicit teaching of study strategies with content area materials" (p. 233). Also, Anthony and Raphael (1989) indicate that studies which show that self-questioning is not successful, may have involved students who were not taught how to use the strategy effectively.

Notetaking

Notetaking is one of the oldest and most widely researched study skills. It involves writing about what one hears or reads. C. B. Smith (1988) maintains that when one writes about his/her reading,

> the reader relates various parts of the text to her/his own experience. . . .The accumulating results [of research] favor written responses over reading alone as a study technique (p. 276).

Smith continues, "Writing as a response to reading seems to achieve positive results largely because it enhances the reader's ability to organize (p.277). According to Tonjes and Zintz (1987)

> Efficient notetaking requires many cognitive skills: . . . careful reading, clear thinking, discriminating among key thoughts, digesting ideas, and condensing and summarizing them" (p.225).

Those skills are addressed in one of the most well-known notetaking system, Francis Robinson's SQ3R method, survey, questions, read, recite, review. A part of reciting is to "jot down cue phrases in outline form on a sheet of paper. Make these notes very brief" (Robinson, 1946, p. 28). Robinson goes on to state that writing down the answers to questions

> . . .is more effective since it forces the reader actually to verbalize the answer whereas a mental review may often fool a reader into believing that a vague feeling of comprehension represents mastery. . . . in writing notes, one provides visual and kinesthetic cues as well as verbal imagery in thinking about it. (p. 30).

Walter Pauk developed the split-page or Cornell Note Taking System "some forty years ago at Cornell University" (Pauk, 1989, p. 144). The system has been used widely not only in the United States, but in Europe and China (p. 144). Pauk has devised two methods of note-taking with the Cornell method. He calls one method the Six R Version: 1. Record, 2. Reduce, 3. Recite, 4. Reflect, 5. Review, 6. Recapitulate. The second method Pauk calls the One Q/Five R Version: 1. Record, 2. Question, 3. Recite, 4. Reflect, 5. Review, 6. Recapitulate (p.144).

On the importance of note-taking, Bernstein, Roy, Srull, and Wickens (1988) conclude that failure to rehearse mentally the information immediately received may result in forgetting that information within 20 seconds. (p. 293) As Pauk states, "Forgetting wipes out information like a tornado. Notetaking provides disaster relief" (Pauk, p. 157).

Similar to Pauk's versions of notetaking, Manzo derived a system known as REAP, an acronym for Read, Encode, Annotate, and Ponder (Eanet and Manzo, 1976). "Central to the REAP strategy is having students learn to write annotations specially designed to achieve certain learning objectives" (p. 648).

"Unfortunately, most notetaking is summary notetaking that does not require students to use their own opinions as they interact with the text," says Thomas Ryan (1990). Ryan

suggests that REAP can help avoid "passive notetaking" and encourage students to interact with the text in a more personal and assertive way (1990).

Research shows that notetaking can be effective in helping students retain what they read. Driskell and Kelly (1980) found higher grade point averages among at-risk college students who used a guided notetaking strategy combined with Robinson's SQ3R method than the grade point averages of similar students who did not use such strategies. Hartley and Davies (1978) reviewed seventeen studies showing that note takers performed better than non-note takers; sixteen studies found no difference, and two studies found that notetaking interfered with performance.

However, Kiewra (1985) showed that students who were allowed ample time to review their instructors' lecture notes performed better than students who simply used their own. This finding makes a clear case for the need to teach and to model notetaking activities. Boon (1989) comments on the necessity of teaching students how to take notes "and how to use them for review" (p.534). She asserts that notetaking and reviewing those notes are crucial to learning. (p. 534) More recently, Spires and Stone (1989) tested a directed notetaking activity with a self-questioning strategy.

> The DNA was based on three instructional principals: (1) a structured format for taking

> notes commonly referred to as the split page method; (2) a self-questioning strategy for monitoring levels of involvement before, during, and after notetaking; and (3) direct, explicit teaching of the notetaking process adapted for notetaking instruction from Pearson's model (1985) for teaching reading comprehension (p. 37).

The authors found that the students who used the Directed Notetaking Activity outperformed control groups and "felt more confident in their notetaking capabilities after they received instruction in the self-questioning strategy" (p.39).

Banocy (1986) found that regardless of the kind of test students took -- essay, completion, or multiple choice -- students' notes that identified major ideas in the textbook correlated significantly with higher scores. Conversely, notes that concentrated on minor ideas showed less correlation with high scores.

What kinds of notes are effective in helping students retain information? Certainly notes taken with the SQ3R and REAP methods require students to write and think. Other kinds of notetaking are paraphrasing, summarizing and outlining.

Paraphrasing/Summarizing

According to Roe, Stoodt, and Burns (1988), paraphrasing "involves restating information in an equivalent statement" (p. 104). It is a sentence

comprehension strategy that requires the reader to understand the thought being expressed in the sentence to be paraphrased. Roe, Stoodt, and Burns identify two types of paraphrasing: "semantic paraphrasing in which synonyms are substituted for words in the original sentence," (p. 104); and "syntactic in which the order of the words in the sentence is changed" (p.104).

Gall, Gall, Jacobson and Bullock (1990) view paraphrasing simply as notetaking. "The notes are not a verbatim copy of the text, but a paraphrase that represents students' mental organization of it" (p. 118). Paraphrasing was found by Weinstein to facilitate reading comprehension and recall (Page, 1982). Pearson and Johnson (1978) recommend a paraphrasing exercise to teach the relationship of cause and effect.

Summarization skills are among the most complex of study skills. Gall and others (1990) and Vacca and Vacca (1989) state that writing summaries is difficult for students. "Writing text summaries may be effective, but only for students who can do so with proficiency" (Gall and others, 1990, p. 121.) The older the students, the more skilled they are at writing summaries (Vacca and Vacca, 1989). Day (1980) found that giving students methods of summarizing improved their ability to find the main idea, and to delete trivial information. However, students with poor writing skills needed more training than students with

proficient writing skills. As Pincus, Geller and Stover (1986) note

> Both comprehension of expository text and the ability to summarize are factors in students' success. . . . Simply giving students the directive to read and summarize does not provide a methodology (p. 157).

Anderson and Hidi (1988/1989) emphasize direct teaching of summarizing skills. They recommend that the teacher begin with simple texts, especially narratives. Students then should be allowed access to the text as they summarize. Teachers should help students focus on important information by finding the main ideas in the text. Finally, teachers should emphasize that the summaries should be writer-based, for the students' own understanding, not reader-based, for the teacher's evaluation (Anderson & Hidi, 1988/1989, p. 23).

Karl Taylor (1984a) notes that summarizing involves reading, analyzing, and writing, "distinctions that are neither clear nor absolute, but that provide an arbitrary way of breaking down a complex task" (p.389). He found that when readers did not recognize the structure of what they read, they were unable to draw generalizations from the text (p. 390).

To address the structure or organization of text, B. Taylor (1982) proposes a hierarchical summary that

emphasizes the organization of main ideas in expository selections. The procedure improved middle school students' recall and quality of their expository writing. Students who learned to use the hierarchical summary strategy could recall more information from unfamiliar material than students who used more conventional reading and study techniques (B. Taylor,1982). Morgan and Deese (1969) also recommend using an outline as a guide for a summary, making sure that each paragraph of the summary match a major point in the outline.

K. Taylor (1984b) compared the summary skills of high school and college students with those of adults in a variety of professions in which reading and writing are a part of their responsibilities. He found the professionals more proficient than students in the following ways: Professionals spent greater effort and time in studying the text, looking for structure and theme, thinking before they wrote, checking back to the text, achieving objectivity, respecting the difficulty of the task. K. Taylor also found that, unlike the students, the professionals rewrote their summaries several times before completing the final draft. Also, unlike the students, the professionals expressed more frequently their dissatisfaction with their product. K. Taylor concludes that "practice and experience are major factors in these differences" (1984a, p. 698). He recommends that teachers help students identify the

structure of the text, encourage careful analysis of their reading before writing summaries, and allow them to discuss their summaries with their classmates (1984a).

Walter Pauk (1989) recommends writing a one-sentence summary after reading each paragraph, and he explains how students can identify the topic sentence, the supporting sentences, and the concluding sentence of a paragraph (p.349). Robert Karlin (1972) recommends modeling the summary activity by having the teacher and the students all read the same passage, list the main ideas on the chalkboard, and use them to write a summary (p. 205).

Carr and Ogle (1987) use K-W-L Plus, "recalling what is known, determining what students want, . . . identifying what is learned" (p. 626). After the students have completed the K-W-L steps, they map what they have learned into a graphic image and summarize the material. (See the discussion below on semantic mapping.)

> K-W-L improves student's summarization skills because important information has been selected during K-W-L and organized and integrated during mapping. Thus, the most difficult part of summarizing - selecting information and organizing it - has already been completed by the reader (pp.629-630).

Vacca and Vacca (1989) contend that summarizing has been "too infrequently used in content area classrooms" (p.227). They cite research showing that summarizing helps

students retain important ideas.

Outlining

Just as summarizing can be viewed as a notetaking activity, outlining is also a kind of notetaking. In Effective Study Habits (1931), Charles Bird proposed the "Inductive Outline" that is similar to Pauk's split page notetaking format. Bird advocated dividing the page into three vertical columns. The first column would be labeled "What are the facts?" The second column would be labeled "What is their immediate significance?" The third column would be labeled, "What is their larger significance?" Notes taken with these questions in mind, according to Bird, would help avoid the "shallow thinking" that results "when one can command only a meager range of relevant facts" (p. 145).

Policastro (1975) states, "Because of its dependency on major and subordinate information, outlining should be the first notetaking method taught" (p. 374). He further states that material organized as classification, sequence, and chronology is most easily transcribed into outline form.

Segal (1980) found that outlining enhances both immediate retention and long-term retention after 48-hour hours. Pfeiffer (1984) found the Personal Outlining Strategy and the Think-Link Strategy to be effective in helping fourth-grade students retain information from

expository texts.

Hansell (1978) states, "Learning to outline requires learning to identify ideas and to show how they fit together" (p. 248). He recommends using an "array,"

> a free form outline which requires that students decide how to arrange key words and phrases to show how the author fit them together. The symbols employed are words, lines and arrows (p. 249).

He found that seventh-grade students trained in the use of array outlining scored better on a post test requiring them to use a conventional outline than students who had not been trained in array outlining.

Graphic Organizers

A discussion of outlining leads logically to a discussion of graphic organizers. Gall, Gall, Jacobson, & Bullock (1990) maintain that preferable to outlining, "A simpler and more generally applicable method of organizing information is the graphic organizer" (p. 119). Linda Lee Johnson states that "while writing is linear, graphing is spatial, and the two may appeal to students with different learning styles and interests" (p. 513). Shimmerlik (1978) states "The beneficial effects of organization are attributed to the fact that the organization provides the subject with a retrieval scheme"

(Shimmerlik, 1975, p. 105). Shimmerlik (1978) also states, "Retention on a short-answer test . . .was higher when the material was presented in a logical order than it was when presented in a scrambled order. . ." (p. 108).

Graphic organizers are holistic, giving students an opportunity to see main ideas and concepts at a glance. Gall and others note that the graphic organizer is called by different names: networks, maps, concept maps, and structured overviews (p. 120).

As will be seen below, a number of studies have shown that organizing concepts or main ideas in a graphic way aids understanding of content, particularly if the content is expository. (Jones, Pierce and Hunter, 1988/1989).

> There is some evidence that using graphing techniques to represent the organization of text improves learning. . . .Students should be familiar with a range of graphic organizers so that they can illustrate concepts, and relationships between concepts, that are distinctive to various disciplines (p. 120).

Linda Lee Johnson states that "graphing across the curriculum is coming of age" (Johnson, 1989, p. 513). She found that allowing students to make their own creative graphing "benefits comprehension, slowing [students] down enough to see how apparently random details fit together" (p. 511).

Smith and Tompkins (1988) link graphic aids to a text's

organizational structures. They contend that

> students whose notes follow a text's structure encode information more meaningfully and retrieve it more easily than students whose notes do not reflect a structural organizer (p.48).

Thus, Smith and Tompkins use "graphic organizers in which top level structure (main idea) used by the author is "explicit in the graphic" (p.48). In other words, rather than taking notes in a split-page or outline form (See discussion above.), students graph the main ideas of the text depending on its organizational structure.

Structured Overviews

A well-known types of graphic organizers is the structured overview (Berger, 1989, p. 273) which shows the relationship between unfamiliar terms in content reading. It was developed by Richard Barron (Barron and Stone, 1979) who defines it as

> a visual/verbal presentation of key vocabulary in a new learning task, in relation to broader, more inclusive terms (presumably) understood by students (p. 173).

Barron found initially that when teachers used the structured overview to help students learn vocabulary, the students did not do very well. He later determined that

students understand the concepts better when they became actively involved in the construction of the structured overview.

> When students constructed their own structured overview during or following a reading/learning task, they would achieve higher test scores than those who received one made by the teacher (Barron, 1979, p.173).

A. L. Smith also found that "successful utilization of structured overviews may hinge on student participation" (Smith, 1978, p. 78).

Vacca and Vacca caution teachers to remember that the structured overview "always shows vocabulary in relation to more inclusive vocabulary concepts" (p. 131). Thus, the construction of a structured overview involves identifying superordinate, coordinate, or subordinate concepts (Roe, Stoodt, & Burns, 1989, p. 56).

Barron later found that structured overviews seem to work best when used not only during the reading, but after students have finished the reading assignment. Thus he later called it the graphic post-organizer. (Estes & Vaughan, 1985, p. 140).

Semantic Mapping

Another kind of graphic organizer, somewhat similar to Hansell's array mentioned above, is the technique of

semantic webbing or semantic mapping, as it is more commonly known, "a graphic arrangement showing how the major and minor ideas are related in a written work" (Sinatra, Stahl-Gemake, & Morgan, 1986, p. 4). Vacca and Vacca contend that with thorough teaching, students can learn to use maps to aid their understanding of their text (p. 209). Sinatra, Stahl-Gemake, and Morgan (1986) encourage the use of semantic mapping not only to enhance comprehension but to improve writing. Tonjes and Zintz recommend teaching semantic mapping as an alternative to outlining. They assert that mapping

> is a powerful tool for helping students find main ideas and supporting detail. Mapping is similar to designing a flow chart in that there is hierarchical order and words are minimal (p. 228).

Graphic Aids

Similar to graphic organizers, graphic aids are already in the textbook as an aid to understanding the text. They include charts, graphs, tables, maps, pictures, and cartoons (Vacca and Vacca, 1989). Roe, Stoodt, and Burns (1987) also include maps, charts, graphs, tables, and pictures as primary examples of graphic aids; but they list diagrams as well. In other words, the author has done the work for the reader, who otherwise may have to create his/her own graphic aid. Vacca and Vacca assert, "The fact is that graphic materials enhance understanding and interpretation" (Vacca

and Vacca, 1989, p. 243). Fry (1981) suggested a taxonomy of graphic aids to assist student learning. He divides graphs into four categories: lineal, quantitative, spatial, pictorial, hypothetical, and near graphs. (p. 384). While graphic aids in the text can enhance learning, "Students tend to skip over graphic aids entirely or pay only cursory attention to them" (Vacca and Vacca, 1989, p. 243). David Reinking (1986) recommends the direct teaching of graphic aids. He asserts that "Effective use of graphic aids often depends on the reader's ability to integrate graphic information with that found in the text" (p. 146). He asserts that the Graphic Information Lesson was found to be successful with middle school students. Summers (1965) outlined four requirements to enhance student learning from graphic aids: 1. recognize separate elements in graphic aids; 2. understand the relationships between the elements in graphic aids; 3. ask questions about structure and content of graphic aids; 4. derive inferences and conclusions from graphic aids.

Vocabulary

Vocabulary is an "important component of content-area reading" (Lamberg & Lamb, 1980, p. 31). Often, when students move from elementary school into secondary school they face the challenge of technical words which are "peculiar in meaning and usage to a specific content area" (Lamberg &

Lamb, p. 32). Dillner and Olson (1977) divide technical words into three categories: 1) words used only in a given content area; 2) common words that have specialized meaning in a given content; 3) specialized symbols and abbreviations.

Dupuis and Askov (1982) advocate using word attack skills in content reading. They identify four basic word attack skills: structural analysis, sound patterns, outside references (i. e. the dictionary), and context clues. Since this study is concerned with homebound students independently learning from text, the most appropriate word attack skill for that purpose is use of the context clue. As Kaplan and Tuchman (1980) state, "the most successful strategies for dealing with vocabulary are those that will lead students to become independent learners" (p.33). They assert that "Predicting the meaning of a word using context clues is extremely useful to independent learners" (p.34).

Context

Using context analysis, students can be taught to infer the meaning of a word based on the context in which it is found. They can do that by using a variety of context clues identified by Lamberg and Lamb (1980) and by Tonjes and Zintz (1981). Using context clues to derive the meaning of words in a particular setting "is a strategy most often used by mature readers to attack new words" (Tonjes & Zintz,

1981. p. 154).

Blachowicz and Zabroske (1990) take issue with the effectiveness of context clues in arranged lists They find them to be contrived and irrelevant to "real reading" (p. 505). They devised a model based on metacognitive interventions so that students must know why and when to use context. After reading and hearing anecdotal evidence, Blachowicz and Zabroske conclude that their metacognitive approach was a success.

All of the above notwithstanding, Vaughan (1982) is skeptical about context clues.

> . . .there appears to be no empirical evidence to suggest that instruction in the use of specific context clues per se results in either improved ability to use such clues or an overall improved reading ability among adolescents (p.74).

Apparently the jury is still out.

Concepts

In helping their students learn from the text, content area teachers must teach the technical words relevant to a particular discipline with respect to both the contexts in which those words are used and the concepts with which they are associated. Learning words in context makes it possible to teach vocabulary with regard to the concepts that certain terms represent. As McKee (1931) states, "The most

fundamental task in the development of an adequate reading vocabulary is the building of many accurate concepts, or meanings, in the child's mind" (p. 278). Lamberg and Lamb (1980) define concepts as a "referents of the technical terms and symbols" (p. 41). Dupuis and Askov define a concept as "a cognitive process . . . known by its characteristics, its components" (p. 171). They advocate "focusing on concept learning and its interaction with vocabulary development" (p. 171); and they maintain that the teaching of concepts should be "as concrete as possible" (p. 172). Kaplan and Tuchman (1980) advocate tying concepts to students' prior experience.

In regard to prior experience, Duffelmeyer (1980) worked with students who learned new words through the use of skits to enact the word, and thus learned the word and its concept "experientially" (p. 39). A comparison of the two sets of test scores on the Nelson-Denny Reading Test showed that "the experimental group means were consistently higher than those in the control group at all levels of reading ability" (p. 39).

Henry (1974) states that conceptualizing "means to discover relationships and to invent a structure of these relationships" (p.14). He identified four basic components to concept development: the act of joining, the act of excluding, the act of selecting, and the act of implying. Teachers can use these components as a part of their

vocabulary study. As Dupuis and Askov state, "vocabulary study is inseparable from concept development. The two are essentially the same thing" (p. 175). They provide examples of structured overviews using Henry's four categories.

Roe, Stoodt, & Burns (1987) recommend using the Frayer method of teaching new words that represent new concepts. In brief, the Frayer model involves defining the new concept and stating its characteristics, distinguishing it from similar concepts, and giving examples and nonexamples of the concept (p. 230).

Vacca and Vacca (1989) state that

> Words are labels - nothing more, nothing less - for concepts. . . .Answers to the question, "What does it mean to know a word?" depend on how well we understand the relationships among personal experiences, concepts, and words" (p. 299).

Vacca and Vacca go on to assert that learners

> organize all [their] experience and background knowledge into conceptual hierarchies according to class, example, and attribute relations. Teachers can help students build conceptual knowledge of content area terms by teaching and reinforcing the concept words in relation to other concept words" (pp. 300, 302).

This can be done by "thinking about, thinking through, and thinking with the technical vocabulary of a subject" (p. 304).

Vaughan (1982) emphasizes the effectiveness of "contextualizing vocabulary instruction by introducing new terms in a meaningful context . . . that clearly elaborates the concepts associated with the new terms" (pp. 73-74). Vaughan also contends that an effective approach is to reveal new terms in a context that "clearly elaborates the concepts associate with the new term" (p. 73). He also states that

> vocabulary instruction research seems to indicate that a focus on concepts and meanings in familiar contexts is more profitable than a focus on words especially in isolation. (p. 74).

It is evident from the ideas presented above, that helping students manage new terms in content area reading involves teaching vocabulary in the context of student experience, the written passage and the concepts that are central to an understanding of the reading.

Study Guides

While study guides are instructional tools devised by the teacher or the textbook writer and not usually by the student, it is justifiable to address them in this study in that homebound teachers were asked to state the frequency with which they used study guides. (See Appendix A below.) Estes and Vaughan (1985) warned against wholesale use of study guides. Instead, the authors suggest that their

construction and use be dictated by the instructional circumstances. Santeusanio's (1983) discussion of research on study guides indicates that they can be effective.

Herber (1978) developed the three-level study guide that contains questions on the literal, the interpretive, and the applied level, encouraging students to read for meaning that goes beyond the mere facts of the passage.

> The statements reflect what can be literally understood from the selection, what can be inferred from the selection, and what the reader may be able to apply from the selection (Santeusanio, p. 106).

According to Herber, the applied level of comprehension is "the process of taking what has been known and applying it to what has just been learned, then evolving ideas which encompass both but extend beyond them" (p. 14).

Robert Karlin (1972) devised the process guide and the content guide. The process guide shows students how they can read content to acquire information. It specifies skills like finding context clues or noting cause and effect that will be needed to understand a given passage. The content guide addresses the actual content of the passage and indicates where information can be found (pp. 397 - 309). Roe, Stoodt, and Burns (1987) suggest combining process and content guides into one that provides an overview question and then a number of questions that address both the process

for finding information and the content that should be addressed.

According to Dupuis and Askov (1982), study guides have several advantages. They can provide for different rates of working, (thus allowing students to work at their own pace), address different reading levels and abilities, and focus on a variety of thinking and reading skills in the same content area (p. 192). Dupuis and Askov recommend concept guides that are especially appropriate for literature, social studies or any subject in which the teacher emphasizes ideas, concepts or generalizations. Tonjes and Zintz (1981) observe that concept guides address the two steps of learning, "Trigger - we become aware of an idea; frame - we categorize it by relating it to our past knowledge and experience" (p. 313).

Tutolo (1977) identified two types of guides, interlocking and noninterlocking. Interlocking guides are similar to Herber's three-level guide in that they address literal, interpretive, and applied reading levels, each of which is categorized in its own group. Noninterlocking guides do not categorize the levels into distinct groups.

Vacca and Vacca (1988) suggest using a selective reading guide when the teacher wants to concentrate, perhaps, on one or two concepts. She/he "selects those sections of the reading which are necessary to achieve this purpose" (Cunningham, & Sheblak, 1975, p. 318). Thus, the

selective reading guide does not address the whole chapter of a textbook, but only specific concepts therein.

Vacca and Vacca (1988) assert that study guides are effective.

> A guide stimulates learning and stimulates the processes required for independent reading. It shows students how to handle material effectively and efficiently over time so that they will develop the maturity to eventually read on their own (p. 163).

Estes and Vaughan (1985) caution, however, that study guides must not be overused, but must be adapted to fit an individual classroom situation.

Comprehension Questions

Estes and Vaughan (1985) state that textbook questions may help students see what to remember or consider most carefully. Their comparison of textbook questions with study guide questions shows that textbook questions tend to assume reading skill, ignore individual differences, focus on recall, foster passive learning, emphasize product over process, promote memory. Study guide questions, on the other hand, tend to develop reading skills, compensate for individual differences, focus on conceptualization, foster activity, emphasize process as well as product, promote problem solving, build independence (pp.175-176).

Closely associated with study guides are questions used

to comprehend the text; questions in the actual textbook itself can be helpful. Turner (1989) states

> The fact remains that textbooks structure and control instructional time. Teachers rely heavily on textbooks for the expertise they do not have and do not have time to organize. . . . Textbook questions may be the best available material for fundamental instructional purposes. . . . These questions save teachers time in not having to create their own (p. 58).

Tierney and Cunningham's (1981) review of a number of studies on the use of questions to enhance comprehension shows that such questions are beneficial. J. Cunningham (1986) states that teacher-generated questions are of three types: evaluative questions to see what the students already know, cognitively stimulating questions that guide students toward particular learnings, and questions that do both. Santeusanio (1983) observes that adjunct questions have value. (See discussion below regarding the definition of "adjunct questions.") He goes on to observe that they are especially effective when

> . . .the material to be read is difficult to read; when the goal of the questions is to learn only the information that is necessary to answer the questions; and when the information tested by the questions is among the most important in the text (p. 94).

Santeusanio recommends relating adjunct questions to

organizational patterns, especially the patterns of main idea/details, sequence, cause/effect, and persuasion. In this case the questions can come from the textbook or can be generated by the teacher.

Scholars differ on the definition of adjunct questions. Santeusanio (1983) defines them as "questions read before, during or after a reading assignment" (p. 94). Daines (1982) confines her definition only to "questions inserted into the text" (p. 177). Tonjes and Zintz (1981) reflect Daines' definition; adjunct questions "are used to guide readers while they read, not before or after" (p.313). Vaughan (1983) also implies that adjunct questions are inserted in the text, and he distinguishes them from prereading or postreading questions (p.75). In this review of related literature, the writer will use Vaughan's more limiting definitions: adjunct questions are questions inserted in the text to guide readers as they read. Questions to be considered before students read are prequestions, and those to be considered after students read are postquestions (p. 75).

Prequestions

Flood and Lapp (1990) discuss what strategic readers do before they read.

> Before reading, the strategic reader:
> Previews the text by looking at the title,the

> pictures, and the print in order to evoke relevant thoughts and memories.
> Builds background . . .through self-questioning about what he/she already knows
> Sets purposes for reading by asking questions about what he/she wants to learn (p. 491).

Thus, Flood and Lapp emphasize previewing, building background, and setting purpose.

Vaughan states, "Prior knowledge is a significant determiner of what a reader will understand and remember from text. . . .Prereading components of SQ3R and DRTA are among the most attractive features of these strategies" (pp. 71-72).

Since SQ3R has been discussed above, it will not be addressed here; however, DRTA will be discussed briefly. DRTA, directed reading-thinking activity, was developed by Stauffer (1975) with the idea that reading is a reasoning process and that students can be taught to increase their ability to reason through practice. The prereading section of DRTA involves predicting what the content will contain and identifying the purpose for reading; it is these elements that Vaughan (see above) finds attractive.

Langer's (1982) prereading plan known as PreP is based on her idea that everybody knows something about "almost anything" (p.150). PreP uses questions to help students relate their background knowledge, what they know "about almost anything," to the knowledge they will attain in their reading. PreP has three steps, initial associations with

the concept, reflections on initial associations, and reformulation of knowledge. This method encourages students to use the information they already have, to collaborate with peers, and to reflect on new information. (Anthony & Raphael, 1989). In this regard, Roehler and Duffy (1984) find that giving students reasons for the use of a given prereading strategy encourages them to develop their own independent prereading questions.

Another prereading question technique is C-T-A, Concept-Text-Application (Wong and Au, 1985). "Although designed for elementary students, this technique can easily be adapted for older students in content area classes" (Anthony & Raphael, p. 249). In C-T-A, the teacher previews the reading selection, discusses the main idea in terms of students' prior knowledge, generates questions from the discussion, asks students to read in light of such discussion, and has group discussions of those questions after the reading.

Each of the prereading approaches mentioned above encourage questions that relate students' background to new information to be learned. Below the reader will find how questions can be used to help students interact with the text as they read.

Adjunct Questions

As noted above (Santeusanio notwithstanding), adjunct

questions are those inserted in the text as the student reads. The findings of researchers favor the use of adjunct (intertextual) questions (Anderson and Biddle, 1975; Rickards and Denner, 1978). According to Graves and Clark (1981), low achieving adolescent students increased their comprehension when they answered adjunct questions that were inserted after given sections of the text. Vaughan states that the Graves and Clark study is the only one that verifies that adjunct questions are more effective than prereading or postreading questions. "It seems that adjunct questions stimulate an interaction with text for readers who may not otherwise stop to reflect upon what they have read" (Vaughan, p. 75).

Daines maintains that different kinds of adjunct questions bring different results. For example,

> When students are given adjunct questions at the application [reading] level about concepts and principles, their ability to solve problems involving these concepts and principles is enhanced, whereas adjunct factual questions did not have this effect (pp. 177-178).

Daines goes on to assert that "higher level questions [in Bloom's taxonomy (1956)] encourage students to read the passage more carefully, thereby resulting in greater recall" (p.178). Hamaker (1986) also finds that higher order adjunct questions are more effective than factual adjunct questions.

Koran and Koran (1975) showed that among college students, retention of information increased with question insertion. Rickards and DiVesta (1974) assert that questions inserted at the end of every second paragraph in the text encourage higher verbatim recall than questions inserted after every fourth paragraph.

Postreading Questions

Mature readers often seek the opportunity to reflect and react with others about what they have read or learned (Estes and Vaughan, p 178). As Flood and Lapp assert, after reading, the strategic reader

> summarizes what has been read. . . .
> Evaluates the ideas contained in the text;
> Makes applications of the ideas. . .to unique situations (p. 491).

Anthony and Raphael state

> Postreading questioning is perhaps the most familiar component of reading instruction. . . . [There is] new interest in the role of postreading questions in enhancing students's comprehension of text, not merely assessing it (p. 253).

They recommend postreading questions that emphasize summary as a way of review.

Anthony and Raphael recommend using the text's organizational structure as an aid to students selecting and

discussing relevant information. In this process, both content and process questions are effective.

Rather than using postreading questions per se, Estes and Vaughan suggest using Barron's graphic post-organizer as a way of reviewing what has been read. (See discussion above.) They also recommend using study guide questions as a way to review the material.

Raphael (1982, 1986) showed that teachers could use the Question/Answer Relationships (QAR) approach and could teach students how to use it independently. The QAR approach is based on Pearson and Johnson's (1978) idea that questions asked should be based on information students need to know to find the answer. They identified questions that are based explicitly on the text, based implicitly on the text, and based on the student's schema. Raphael (1982) labeled those categories "Right there," "Think and search," and "On Your Own." Vacca and Vacca show that these categories relate to Herber's (1978) levels of comprehension mentioned above. "Right there" relates to the literal level; "Think and search" relates to the interpretive level; and "On your own" relates to the applied level. Flood and Lapp (1990) state that students trained in QAR activity showed significant gains in comprehension. QAR could be an effective tool in any of the three types of comprehension questions of student learning.

Davey found (1988) that secondary teachers frequently

have students answer questions at the end of the chapter in the textbook. However, in an open-ended question in that same study, only two per cent of the secondary teachers stated that the best thing about their textbook was the questions at the end of the chapter.

Three Postreading Methods

Judith Langer (1986) examined how students approached three study tasks: completing short answer study questions, taking notes, and writing essays -- three kinds of writing methods that teachers often use to help student learn from the text. In answering questions, the students focused on restating the questions and searching the text for the right answer rather than paying attention to what they thought about the text. They did not review, rethink, or revise.

In the notetaking activity in Langer's study the students focused on content of the text more than they did while answering questions or writing the essay. However, their notes tended to be fragmentary and incoherent.

In the essay writing activity students paid more attention to generating ideas, integrating and evaluating them. "Of all three activities, when writing essays students seem least bound by the immediate content, focusing instead on manipulating and reorganizing new material" (Langer, 1986, p. 406.) From her study Langer recommends using study questions to invoke quick recall, essay writing for

"reasoned learning of less material" (p.406), and note taking for "a balance somewhere in between" (p.406).

Skimming and Scanning

Certainly in finding answers from the text to any question, students can skim or scan the material to find the desired information. Skimming is a form of rapid reading used to gain a general idea of the material. It can also be used to determine the organizational structure of a passage. Scanning is even more rapid than skimming. It is used to locate a specific piece of information (Daines,1982). Both of these skills can be used by students to deal with prereading, adjunct, or postreading questions.

In her survey of college students' opinions of which study skills were helpful to them, Ritter (1971) states that 87 per cent of the respondents found skimming either of some use, pretty useful, or most useful. Karlin (1972) recommends "hop-skip-jump reading that skips nonessential words." He recommends "hopping" over prepositions, articles and nonessential adjectives and looking only for nouns, verbs and essential modifiers. (p. 248) Vacca and Vacca (1989) recommend teaching skimming skills to students as a way of helping them preview the reading material. Their technique teaches students to identify the topic sentence of each paragraph to get a general idea of what is contained in the material. Maxwell (1972-1973), on the other hand, found

that skimming was not helpful in identifying the main ideas, but it was effective when students were already familiar with the material. Robinson (1975) observes that not only can skimming be used by students to preview, but also to decide if the selection contains information they need to answer a particular question.

To motivate students to acquire of skimming skills, Memory and Moore (1981) recommend introducing a controversial topic such as reinstating the draft, asking students to skim articles on that topic and to identify the ones they would set aside for more in-depth reading in preparation for a persuasive essay.

Santeusanio observes that teaching slow readers to skim can enhance their reading rate. He also recommends Fry's (1978) example of skimming wherein Fry duplicates a page of text and inserts blanks for all the unnecessary words, leaving only the words that a good skimmer would notice as the eyes move down the page.

As students learn to scan a page for a given word or phrase that will answer a question, Karlin (1972) recommends showing students how to use words in the question to locate words in the text. "The question contains the clue to the type of answer sought" (p. 246). Roe, Stoodt, and Burns (1987) suggest having students scan a telephone book to find a specific person's number.

Conclusion

As the reader can see, homebound teachers have at their disposal a variety of sources, both theoretical and practical, to help students study effectively. While the question of whether teachers access those resources is beyond the limits of this dissertation, it is certainly salient to a major question addressed herein: What kinds of study skills do homebound teachers use with their students?

CHAPTER III

PROCEDURES

Student/Parent Interviews

As was outlined above, this dissertation is a descriptive interview study consisting of two basic parts. The first part consists of audio-taped, open-ended interviews with ten selected high school students (grades nine through twelve) who had received or were receiving homebound instruction during the school year 1989 - 1990 from a single county school system in East Tennessee. Total secondary school enrollment for the school year, 1989 - 1990, was 2879 (State of Tennessee, 1989-90 Directory of Public Schools, pp. 50-51). Mothers of the students were also interviewed.

The writer conducted and recorded the interviews with an audio cassette recorder only after consent forms were signed by both the students and their parents. The following facts were made clear to interviewees: (1) Their participation was voluntary. (2) Neither their participation nor lack thereof would impact on the students' academic records. (3) The interviewees would receive no remuneration for their participation. (4) Names and records of the participants would be kept confidential and would be known only to the writer. (5) Transcripts of the interviews and records of the participants would be kept in a locked

cabinet in the writer's office.

The students were secondary homebound students (grades nine through twelve) who had been taught or were being taught by the interviewer during the 1989-1990 school year in the East Tennessee school system in which two high schools are located. None of them were students of the writer in the regular classroom. Demographic data regarding their grade placements (9th grade, 10th grade, 11th grade, 12th grade), grade point averages, diagnoses, race, gender, school attended, date enrolled, and number of days on homebound were compiled. (See Appendix D.)

The students were chosen randomly in the following manner. A list of the homebound students who were being taught or had been taught by the researcher and or her colleague was obtained from the data base of the Tennessee School Register Program, a computerized attendance program kept by the writer for every homebound student (Hamblen County Unpublished raw data, 1990). The list was in alphabetical order, numbered one through 33. A set of 33 random numbers was generated on the TI 35 hand-held calculator. The first ten of these numbers were matched with ten of the student list numbers that corresponded to them. For example, if in calculating the random set of numbers, the first number displayed by the calculator was number three, then the student who had the number three by his/her name was chosen as one to be interviewed. One

student whose number was chosen had to be eliminated because she and her parents had been repeatedly uncooperative with the homebound program in particular and with the school system in general. Because of that history, the writer determined that this student would not be a cooperative interviewee. Another student's name was deleted from the original list and replaced by the next student because the family had moved from the area, and traveling the distance from East Tennessee to Michigan to interview the student in his home was not feasible. In both these cases, when the student was eliminated, the next number on the original random numbers list was then chosen; and the student whose name was by that number was interviewed. When the random-selection process was completed, for purposes of clear discussion for this study, the names of the students and parents chosen were numbered one through ten.

Nine of the parents were interviewed. One parent chose not to be interviewed. All parents interviewed were the mothers, and they were interviewed first. In all but one case it was the mother, not the father, who took the responsibility for putting the student on homebound. In six of the cases the father was not in the home either because of death, divorce or separation. This information was derived not from the questions asked the respondents but from the writer's association with the families over a two to six week period.

The mothers were asked how they heard about the homebound instruction program and why they put their students on homebound instruction rather than directly obtaining assignments from the classroom teachers themselves. They were also asked to discuss candidly their thoughts about the advantages and disadvantages of the homebound program and ways that it could be improved.

Using guidelines developed by Schatzman and Strauss cited in Goetz and LeCompte (1984, p. 129), the writer determined that the interview would be conducted in a single sitting. Because many of the students were on homebound for a variety of illnesses or injuries, and thus sometimes felt ill and/or uncomfortable, the writer determined that the interview should last an hour and a half, the time usually allotted for a single lesson.

The interviews were conducted in the students' homes in the presence of one parent. Being interviewed in their homes among familiar surroundings established a comfortable atmosphere wherein the students appeared to be relaxed amid familiar surroundings. Thus, in the opinion of the writer, they were able to concentrate on the interview in a relaxed environment better than they would have in a classroom or in the interviewer's office. As Goetz and Lecompte observe, it is sometimes appropriate to conduct certain interviews "in respondents' homes or offices or in locations designated as comfortable by those to be interviewed" (p. 130). The

writer was the only interviewer involved. The interviews were conducted in the "conversational mode of everyday interaction" with the goal of using this mode to "elicit the trust, confidence, and ease among respondents necessary for yielding elaborate, subtle, and valid data." (Goetz and Lecompte, p. 131). As Bradburn and Sudman (1979) state, "The occurrence of considerable amounts of nonprogrammed speech on the part of the interviewers may not be a bad thing" (p. 171).

The interviews of students were guided by questions found in Appendix B. These questions were developed based on categories of questions identified by Patton, cited in Goetz and LeCompte (1984, p. 125). Those categories are (1) experience and behavior, (2) opinion and values, (3) feelings, (4) knowledge, (5) sensory descriptions, (6) background and demographic questions. The questions in Appendix B fall in all of the above categories except categories five and six. The content and organization of the questions were determined with the advice from the writer's colleague in homebound instruction and from members of the writer's doctoral committee.

The questions addressed three basic factors involved in the student's homebound experience: school factors, situational factors, and study skills factors. If students chose to discuss factors that were not addressed by those questions, the interviewer encouraged them to speak their

minds freely. In all instances, students and parents were cooperative and candid.

After all interviews were completed, a manuscript of them was word-processed. The transcripts were analyzed using the analytic induction approach found Glaser and Strauss (1967), Goetz and LeCompte (1984), and McCracken (1988). In such an approach one first scans the data for completeness, for categories and relationships, and for "organizing, abstracting, integrating, and synthesizing" the data (Goetz and LeCompte, p. 191). With this approach, and guided by the comparative analysis method outlined by Glaser and Strauss (1967), the writer was able to identify emerging patterns or themes embedded in the transcripts (p. 192). As McCracken (1988) states, "The object of analysis is to determine the categories, relationships, and assumptions that inform the respondent's view. . ." (p. 42). McCracken identifies "five stages of the analysis process" (p. 42) which moves

> from the particular to the general. The investigator begins deeply embedded in the . . .details of the interview transcript and . . .moves upward to a more general observation (p. 42).

Finally, the writer interpreted the data in the light of the major questions delineated in Chapter I above, the review of research discussed in Chapter II above, and the writer's own

experience in teaching homebound students. With this approach, the writer is confident that what she "reports was observed and that what [she] observed was corroborated by various slices of data that have been integrated into the overall scenario" (Goetz and LeCompte, p. 198).

Homebound Teachers' Questionnaire

In addition to the interviews described above, the study contains a second section, a questionnaire sent to 25 homebound teachers from eight county school systems, the one in which the student interviewees were enrolled and seven selected county school systems in close proximity to that school system. The questions on the questionnaire addressed principally how often the teachers taught study skills to their secondary homebound students during the 1989-90 school year. The first mailing of the survey generated a 60 per cent return. A second request generated an 80 per cent return of all the surveys. A copy of the survey is found in Appendix A.

The questionnaire was composed with the help of a homebound teacher, a supervisor of special education who oversees homebound instruction in his school system, a professor of reading in the content area, a market researcher, the writer's major professor and other members of the writer's doctoral committee. Thus, the final design of the questionnaire is the result of input from each of

the sources mentioned above, all of whom are, in the opinion of the writer, knowledgeable in their respective fields.

As Appendix A shows, in the section on the teaching of study skills the respondents were asked to circle items on a Leikert scale which offered choices labeled "always, almost always, sometimes, almost never, never." In addition to questions about study skills, the teachers were asked multiple choice questions with a space for an open-ended answer to state where they learned about those skills. They were also asked such open ended questions as how long they had taught homebound. Finally, they were asked to rank the frequency of the kinds of diagnoses that caused their students to be placed on homebound.

In addition to the above, the respondents were asked to answer questions about a number of experiences that are, in the opinion of the writer, characteristic of homebound instruction. Respondents were given the following choices on a Leikert scale, "very often, often, sometimes, not often, never." As can be seen in Appendix A, these questions center around the cooperation of the parents, the homebound students, and the classroom teachers. They also address whether the teachers were expected to teach all subjects the homebound students were taking and whether they felt adequately prepared to teach those subjects. Finally, the respondents were asked how often they monitored their students' progress when the students returned to the regular

classroom and whether their grades stayed the same or improved after their return. Like the questions about study skills, these questions were analyzed descriptively; the writer determined the percentage of respondents who responded to each Leikert scale choice.

As can be seen by the discussion above, the dissertation contains two parts. One part examines in depth the way in which students use study skills to learn from text. The second part examines whether teachers teach study skills. Chapter Four involves a description and analysis of the data.

CHAPTER IV

INTERVIEWS AND QUESTIONNAIRE

As was mentioned in the preceding chapter, the study consisted of two basic parts: (1) interviews with 10 students who had received homebound instruction during the 1989-90 school year and nine of their parents (the 10th parent chose not to be interviewed); and (2) a questionnaire sent to homebound teachers in the county in which students were enrolled and in the surrounding counties. In this chapter the writer will first provide some background information on the homebound program of the school system in the East Tennessee county where the students were enrolled. That program will be compared to the only other homebound report the writer was able to find, one compiled by the Phoenix Union High School District (1981). In the section on the homebound program, the writer will discuss enrollment numbers, number of days students were on homebound, and types of diagnoses that cause students to go on homebound. All of the information about the East Tennessee county school system has come from unpublished raw data (Hamblen County, Unpublished Raw Data, 1990), documented below and will not be further documented. After discussing the background on the homebound program, the writer will describe the results of the interviews. In the student/parent interviews, the writer will discuss

categories of responses to specific questions and unexpected categories that arose as the respondents felt free to discuss matters that may not have been directly addressed by the questions but that may have been of concern to them. It is useful to know the context in which students apply their study skills for two reasons. First, environment, circumstance and attitude play a great role in how well students are able to concentrate on the tasks that are assigned them. As Flood and Lapp observe, a number of variables affect effective comprehension. Among those are

> reader variables (age, affect, motivation, . . . education variables (environment, task, social grouping, purpose), and teacher variables (knowledge, experience, attitude, and pedagogical approach) (1990, p. 490).

In the section in which students discuss the study strategies that they used, the writer will provide a sketch of each student giving such information as their classification, grade point average, gender, diagnosis, date they entered homebound and the number of days they remained on homebound.

Parents and students have been numbered to assure their anonymity. The writer will refer to them as Parent Two, for example, or Student Six. The audio tape for each interview was transcribed and coded with parent number and student number. The quotes from those interviews will be cited

according to the number of the parent and/or the student. For example, a code of P6 means that the quotation came from the interview with Parent Six. A code of S8, for example, means that the quotation came from the interview with Student Eight.

In regard to the responses of homebound teachers to the questionnaire, the writer will discuss them in terms of the percentages of teachers who responded in a particular way. The writer will also discuss them in comparison to the only other survey of homebound teachers in the literature, that of the Phoenix Union School District.

Homebound Data

As is mentioned previously, the research on homebound instruction is sparse. The only work unearthed by the writer on the subject is found in Homebound Program, 1980 - 81 published by the Phoenix Union High School District (1981) in Arizona. It contains the only survey of homebound teachers, parents, and students (other than the present one) that the author was able to uncover. Though the Phoenix district differs from the East Tennessee county used in the present study, it will be shown below that some information contained in the Phoenix report is informative for purposes of comparison. The two school systems differ in a number of ways. The Phoenix report was based on figures for the 1980-81 school year. The present study is based on data from the

East Tennessee County during the school year 1989-90. Although actual system-wide figures were not given in their report, Phoenix Union High School District appears to be considerably larger than the East Tennessee school system which had a secondary student enrollment of 2,879 in 1989-90. In 1980-81 Phoenix Union had a total of 112 students (grades 9 through 12) on homebound with 11 teachers, five of whom were part time, and six of whom were full time. These figures contrast with the East Tennessee County's figure of 54 homebound students, grades 9 through 12, with two full-time teachers and no part time teachers in 1989-90. Finally, the homebound program in Phoenix Union High School District used a tele-instruction system whereas the program in East Tennessee did not.

These differences notwithstanding, the information from the Phoenix Union High School report is instructive for purposes of comparison in some areas. For example, in 1980-81, 65.2 per cent of their homebound students were female as compared to 59 per cent in the East Tennessee county. While Phoenix had a larger percentage of females on homebound than the East Tennessee county, the fact remains that the majority of students in both programs were girls. This fact may be directly related to the data discussed below showing that in both systems, a major reason for students being placed on homebound was pregnancy. Other comparisons are also of worthy of note.

Table 1 below shows the percentages of homebound students at each secondary grade level in both school districts. One will note that the percentages of ninth and 10th graders in both programs are somewhat similar. However, the percentages for 11th and 12th graders are almost the opposite. The East Tennessee county had almost as many seniors as Phoenix Union had juniors and vice versa.

In light of these figures, it is noteworthy that in answer to the survey of homebound teachers in counties surrounding the East Tennessee county (discussed in more detail below), 40 per cent of the respondents stated that they taught ninth graders. Forty-five per cent taught 10th graders, 60 per cent taught 11th graders, and 50 per cent of the respondents taught 12th grade. (See Table 2 below.)

Table 1

Per cent of homebound students enrolled by grade

Grade	Phoenix Union 1980-81	East Tennessee County, 1989-90
9th	27.7%	30.19%
10th	28.6%	28.30%
11th	30.3%	13.21%
12th	13.4%	28.30%

Table 2

Per cent of homebound teachers in East Tennessee survey teaching at a given grade level

Student grade levels	Percentage of respondents teaching that level
9th grade	40%
10th grade	45%
11th grade	60%
12th grade	50%

Percentages add up to more than 100% because most respondents checked that they had taught more than one grade level on homebound.

Of the students interviewed in the present study, one (10%) was in the ninth grade, three (30%) were in the 10th grade, two (20%) were in the 11th grade, and three (30%) were in the 12th grade. (See Appendix D for additional information about students in the study.)

Table 3 shows the number of days students were enrolled on homebound. At Phoenix Union the largest per cent of students stayed on homebound instruction from 31 to 60 days. In the East Tennessee county the largest per cent of students stayed on homebound from 11 to 30 days. Of the students interviewed in the present study, the fewest number of days a given student was on homebound instruction was nine days. The largest number of days a given student was on homebound was 120.

Table 3

Number of days students spent on homebound

Days	Per cent of Students Phoenix Union 1980-81	Per cent of Students East Tennessee County 1989-90
0 - 10	6.25%	24.07%
11 - 30	28.57%	48.15%
31 - 60	35.71%	18.52%
61 - 90	14.29%	5.55%
91 - 120	6.25%	3.70%
121 - 150	4.46%	0
151 - 180	4.46%	0

Percentages do not total 100% because of rounding to the nearest hundredth.

The diagnoses that caused students to go on homebound in both Phoenix Union and East Tennessee are provided in Table 4 below. Even though the data come from two different systems in different parts of the country in two different school years, the diagnoses found in the two school districts are similar. At Phoenix Union, the three most frequent diagnoses, in order of most to least, were emotional problems, pregnancy, and fractures. In the East Tennessee county the three most frequent diagnoses, in order from most to least, were pregnancy, mononucleosis and fractures.

While an emotional problem was the most frequent diagnosis in the Phoenix Union District, it ranked fourth in the East Tennessee County. While mononucleosis was the

Table 4

The three most frequently reported diagnoses of homebound students in Phoenix Union High School District and in an East Tennessee County

	Number of Students		
	Phoenix Union 1980-81	East Tennessee County 1989-90	
Emotional	38	Pregnancy	9
Pregnancy	17	Mononucleosis	8
Fracture	15	Fracture	5
Totals	70		22
Percentages of total homebound students	62.5%		42.3%

second most frequent diagnosis in the East Tennessee County, only one case among 112 students was listed in the data of Phoenix Union. In an analysis below of a survey sent to homebound teachers in eight East Tennessee counties, 70 per cent of the respondents indicated they had taught pregnant students. Sixty per cent indicated that they had taught students who had undergone surgery. Fifty per cent indicated that they had taught students with broken limbs, and 50 per cent indicated that they had taught students with emotional problems. Only 45 per cent had taught students with mononucleosis. See Table 5.

A comparison of the three sources of data -- Phoenix Union, the East Tennessee County, and the homebound teacher questionnaire -- shows pregnancy to be a common condition

Table 5

Most frequent diagnoses of homebound students, identified by homebound teachers in eight East Tennessee counties

Diagnosis	Percentage of homebound teachers who indicated they had taught students with a given diagnosis
pregnancy	70%
surgery	60%
broken limbs	50%
emotional problems	50%
mononucleosis	45%

that places students on homebound. Broken limbs or fractures are also common to all three sources as are emotional problems. The figures from the county being studied and the homebound teachers who responded to the query indicate that East Tennessee homebound students appear to suffer from mononucleosis to a much greater extent than do homebound students in Phoenix, Arizona. Such information may be used by special services personnel to predict what kinds of diagnoses they may expect to encounter among their homebound students, and thus aid teachers in planning the best way to teach students with these conditions.

As Appendix D shows, a variety of diagnoses prevailed among the students in the study. Three students were placed on homebound for mononucleosis, and three students had been in automobile accidents. Of those three, one broke his hip, one broke her pelvis, and one was left a paraplegic. One

student was placed on homebound instruction for disciplinary reasons; however, shortly afterward, he broke his ankle in several places, causing a physical impairment that made him the fourth victim of broken bones among the interviewees, and left him medically eligible for homebound instruction. Each of the other three students suffered from a variety of maladies: a viral infection, depression, and gall bladder surgery. The reader will note that surgery was a frequent diagnosis of students among queried homebound teachers. Thus, we see that the students, randomly selected, in the study manifested a number of the conditions frequently found in the data of the East Tennessee county and in the data from homebound teachers with one noticeable difference; none of the students was pregnant.

Parent/Student Interviews

As Flood and Lapp (1990) observe, an important variable in reading comprehension and, thus, success in school is motivation. A component in student motivation is family influence. Thus, in the interview with the parents, the writer asked parents of homebound students several questions that relate to motivation for learning:

1. Why did you put your child on homebound?
2. What have been the advantages of homebound?
3. What have been the disadvantages of homebound?

An analysis of the answers to those questions is discussed

in the following paragraphs.

Reasons for Putting a Child on Homebound

Inherent in reasons for putting children on homebound is a desire for them to succeed in school. It could be inferred that such a value expressed by parents had a direct influence on the students' desire to do well, as discussed below.

One reason parents wanted their children on homebound was so that the children would be supervised and taught by a representative from the school system. As one parent stated,

> I felt like she would be better off being supervised by someone other than me. She would pay attention to the teacher. . . it [completing her assignments] would be easier for her knowing somebody else besides her mother was telling that she had to do it (P2).

Parent Eight stated that putting the student on homebound would be

> easier rather than to have to be responsible ourselves for getting back and forth to the school in case we missed something. We thought it would be easier to go through one person. . . . Instead of me running back making sure that I had gotten everybody [contacting classroom teachers for assignments], I could contact one person (P8).

In addition to wanting someone from the school to

supervise their children, parents wanted to make sure that their children did not fall behind in their class work. Parent Eight stated that she was worried that her child would not get enough credits to graduate. Parent Five said, "We didn't want her to get behind in her work, so we requested homebound before she went to the hospital, actually" (P5).

One parent, whose child had missed a great number of days, was told by school authorities that to avoid legal action being taken against her, she must either send her child to school or put the child on homebound. Thus, when asked why she placed her child on homebound she said

> P6: Well, it was what I had to do. It was what the school system said that she had to have done because for it [absence from school] to be legal and everything, you know.
> Interviewer: So you wanted her on homebound so she would be counted present and there wouldn't be a penalty [for the student's absence from school]?
> P6: Right (P6).

The school board policy of the school system states that if a student missed more than 20 days in a given semester, he or she automatically failed that semester (Hamblen County Board of Education, 1989).

One student was placed on homebound for disciplinary reasons. He had become involved in a fight at school, and was in danger of being expelled. As a compromise, so that the student could finish his senior year and graduate, the

authorities gave the student the option of being expelled or going on homebound. Initially, the student wanted to drop out of school, but after talking with his mother, he chose homebound. Thus, his reason for going on homebound was to avoid expulsion and to finish school so that he could obtain his diploma.

Thus, in an examination of the reasons for parents choosing homebound instruction for their children the writer finds that those reasons fall into the categories of (1) a need for help from a teacher involved with the school system; (2) a desire to keep the student from falling behind in his or her class work; and (3) a need to respond to the authorities who have insisted on a choice between homebound instruction or more drastic action.

Advantages of Homebound Instruction

In regard to the questions about the advantages of homebound instruction, both parents and students were given an opportunity to answer this question. Most of the parents stated that the opportunity for their children to "keep up with their work" (P6) was an advantage. Parent Two stated that it kept her daughter "in line with school." Parent Three thought that her child would have failed all her courses without the help of homebound.

In addition to keeping up with the work done by the regular classroom teacher, Parent Four stated that having a

homebound teacher made her child feel less anxious about keeping a good grade-point average.

> I don't think she [her daughter] would have failed, but I think it has, you know, made her feel a little better. . . that somebody was coming, you know, that she was not, you know, all alone. She was making decent grades, and I think she was worried a little bit about it (P4).

Parents were also glad for their children to have individualized instruction. At least four out of the nine parents interviewed saw the personal attention from the homebound teacher as an advantage. One parent stated

> The time that was spent, here with you one-to-one was what was good for him. I think he does well on a one to one (P8).

Another parent equated individualized instruction with discipline and motivation.

> He needed the one-on-one contact because he needed the motivation. He needed the discipline. He's the type that needs to be pushed. He needs to be encouraged and I think he got all of that with the homebound (P9).

Students' Perceptions of Homebound's Advantages

After interviewing parents about why they put their children on homebound, and about their perceptions of the advantages of the program, the writer then interviewed the

students about the advantages of being on homebound. The advantages mentioned by the students echo those of their parents: having a liaison with the school, being given an opportunity to keep up with their school work, and having quiet, undistracted, unpressured time at home to complete their assignments. These views indicate the kind of motivation that is seen in their parents; students indicated that they wanted to do well in school. (One advantages mentioned by five students was not quite so noble. That advantage was the opportunity to sleep late.)

Anyone in education should have been able to predict that parents would appreciate the opportunity for their children to stay current with their work in school and to receive personal instruction from a teacher. It should be no surprise that parents identified such opportunities as advantages of homebound instruction. What did come as a surprise to the writer were two other advantages identified by both parents and students: no distractions and less pressure. A number of parents and students stated that on homebound, the students were not distracted by the general noise and activity of the classroom. For example, Parent Five stated that homebound helped her daughter, "because she had more time here [home] alone and didn't have all the distractions of other kids at school" (P5). In that same vein, Student Four liked being able to work by herself.

S4: One thing I like is being able to work by myself.
Interviewer: Do you really?
S4: Yes
Interviewer: . . .Why do you work better by yourself?
P4: No interruptions probably.
S4: No interruptions. Everybody, you know, teachers talking all the time . . . Students talking all the time. Here [at home] I just do it [the assignments] and forget about it.
Interviewer: So you're saying students talking and teachers talking keep you from getting your work done?
S4: No, they don't keep me from getting it done, but when you do it, it is easier to do [on homebound]. . . I mean there [in the regular classroom], there is still people talking all around you even if they are not talking to you, just loud (S4).

Other students had similar comments. Student Nine said that other students in the regular classroom distracted him "all the time. . . ." In addition, he found it difficult to concentrate on one subject for a full 55-minute class period. As he said,

> In the school room, in the classroom , and stuff, I get distracted. My mind just wanders because I am in there for a whole hour studying just one subject and then I've got to go to another class and stay in there for a whole hour on one subject which I could do it all and just go through it the way I want to and it's easier on homebound . . .because I don't have as long a work study. If I get tired of one subject, I can just lay it down and to another one (S9).

It is evident that this student, a senior who was placed in two resource classes, was distracted not by the noise of the classroom but by the set time in which he was expected to work. He seemed to work more efficiently at home when given the freedom to move from one assignment to another and

back again without the constraints of a 55-minute class period. Apparently, he flourished better with smaller amounts of study time. One is left with the impression that this student either was given little direct instruction in the classroom, or chose not to discuss it with the interviewer.

In regard to pressure in the regular classroom, while the respondents did not actually state their definition of pressure, the context in which they used the word indicated that they equated it with feeling hurried by what they seemed to regard as unrealistic time constraints and expectations encountered in the general school setting. On the problem of pressure in the regular school setting, Parent Six stated that on homebound, her child

> doesn't feel as pressured [being on homebound]. She feels like she can get her work without the hassle of the teachers and everything and them being on her all the time. She's not near as nervous as she was before. She felt pressured when she was in school (P6).

The student, who had a history of depression, corroborated that statement.

> Interviewer: Do you like it [homebound] better than going to school?
> S6: Yes, I do.
> Interviewer: For the same reasons that your mother gave? Less pressure?
> S6: Yes, because less pressure and because I learn more and, you know, I like to learn, but the

way they do it in school, they just won't give you the time of day and you have to do it mostly on your own, and, you know, I have had your help with answering questions. . .
Interviewer: Some people learn better in groups. You learn better by yourself?
S6: Yes . . . because you really don't have to compete with other students and you -
Interviewer: Compete for what?
S6: Grades and acknowledgement.
Interviewer: Hum
Student 6: And when I was in grammar school and middle school I always got acknowledged because I was an honor student and in the Beta Club and everything and now in high school you don't get acknowledged as much.

One could argue that Student Six had problems coping with the pressures of regular high school because of her history of depression. However, other students without such a history also mentioned the pressure they felt in the regular classroom. Student Seven had dropped out of school before he went on homebound. Several months after he left school, an automobile accident left him paralyzed from the shoulders down; and he decided to go on homebound to finish his diploma so that he would be more eligible for vocational rehabilitation training. When the interviewer asked him why he had dropped out of school initially, he said, "Because there was a lot of pressure on me with all the teachers just pressuring me real hard." His mother stated that she believed he had done well on homebound because "He's not distracted, you know, with a lot of his classmates and so forth."

Her son added, "I've not got my mind on girls."

"That's right," she said (P7).

Thus, through the interviews the respondents identified advantages of homebound instruction that most educators would be able to predict, keeping up with class work of the regular school and receiving one-on-one instruction. One also finds the unexpected advantages of being away from distractions of, and the pressure of, regular school.

In regard to the idea of feeling pressured, Elkind (1981) states

> Schools . . . hurry and stress children when the teachers and administrators operate on the basis of stereotypes and false expectancies which place children in fixed compartments of behavior and thought that are often alien to the child's own inclinations (Elkind, 1981, p. 156).

Given both the comments of the students in this study and those of Elkind, it is justifiable to infer that schools may sometimes be stressful places wherein students may feel they are hampered from doing their best work because the kind of pressure on them to succeed conflicts with their need to work in a calmer atmosphere.

Disadvantages of Homebound Instruction

Just as they were pleased with the advantages that homebound offered for succeeding in school, parents were also concerned about the disadvantages that could have caused poor student performance. Seven of the parents

complained that the teacher did not come every day. As Parent Eight stated

> I would like to have a lot more time spent. The school system's homebound teachers, they need to spend more time with each student three days a week, two hours each, something like that (P8).

Also, some were critical of the fact that the homebound teacher was not thoroughly knowledgeable in every subject. As Parent One stated

> It seems to me that the homebound teacher needs, I'm not saying you didn't know, I mean I'm not saying you didn't know everything. . . But they [homebound teachers] need to be more versed. . .in the different subjects (P1).

On the need for the homebound teacher to be knowledgeable in every subject, Student Seven became confused in some assignments that the homebound teacher was unsure about. As the student said

> S7: She didn't understand it much more than I did. If I can't get it on my own, I'd like to have help from somebody that knows what they are doing that can explain it, you know, in a way where you can understand it.
> Interviewer: Yes
> S7: And that's what I wasn't getting (S7.)

As will be shown in the homebound teacher survey below, 95 per cent of the homebound teachers who responded to the

questionnaire stated that they were expected to teach all subjects. Only 50 per cent of them often or very often felt prepared to teach those subjects. Twenty-five per cent said they sometimes felt prepared, and 25 per cent said that not often or never did they feel prepared. With only 50 per cent of homebound teachers usually feeling prepared to teach all subjects, it is no surprise to read the statements of Parent Six who wanted them to be "more versed in the different subjects" and of Student Seven who wanted help from someone well-informed in the subject.

Unlike their parents, who found disadvantages in too few homebound visits and the teacher's lack of knowledge in some fields, for the students, being away from their friends was a major disadvantage. When the interviewer asked what bothered her about being on homebound, Student Four stated

> Not being around nobody. You just have to be here by yourself.
> Interviewer: So you miss all that socializing?
> S4: Yes (S4).

Student Five missed not only her friends but her teachers. She said

> I missed seeing my friends and my teachers. Because I really did like my teachers. As much as I would fight and argue with them, I really did like my teachers a lot (S5).

Student Three said

> I miss my friends. . . Your closest friends come to see you, but still, I have my, you know, day to day activities with all my classmates that I miss.
> Interviewer: So you miss the social interaction with everybody?
> S3: Yes, I mean because some of them are, you know just acquaintances, you know, but they are there to talk to, help, you know, if you need some help (S3).

Student Nine echoed the same theme

> Well, I miss seeing my friends every day which I don't. I mean they still call me and stuff like that, but that's the only disadvantage of maybe being on homebound is the student missing their friends at school (S9).

It should come as no surprise that adolescents who are intensely involved in learning about social relationships should find being away from their friends a major disadvantage of being on homebound.

Other Comments from Parents

Because the interview was somewhat open-ended, parents were given the opportunity to discuss issues other than the questions of reasons, advantages and disadvantages of going on homebound. Two parents commented on their appreciation of the teacher's attempt to tailor materials to the child's individual needs. For example, Student Four was assigned several stories in Voices from the Hills (Higgs & Manning,

1975), a collection of literature by and about people in Southern Appalachia. When the student expressed enjoyment of the book, her mother read some of the stories with her.

> P4: She really enjoyed that book. . . And me and her sat down and read some of it together the other night. She really enjoyed that one.
> S4: The one that talked real funny. I told you about that.
> Interviewer: Yes.
> P4: It would say something about livin' in them thar hills.
> Interviewer: He talked just like we talk.
> P4: We sat down and read some of the book because she said we might enjoy reading it together. . . I noticed she sat with it for a long time one day and she said, "Well, this is really funny. Sit down and look." So we sat there for quite a while, looking at the book together (P4,S4).

The writer neglected to ask whether this mother and daughter made a habit of sitting down together with the child's homework on a regular basis. However, the sense of the whole interview led the writer to infer that reading Voices from the Hills together was a unique experience, initiated by the fact that many of the selections in that anthology are by and about Southern Appalachian people who speak in the dialect very similar to that used by this family. They seemed amused to see a part of themselves in the literature. That experience seemed to be an unexpected advantage of the homebound status of the student.

Parent Nine also expressed appreciation for the homebound teacher's attempt to choose appropriate materials

for her child.

> P9: Well, I hope the other homebound teachers work with the students finding the right materials for them to work with and stuff instead of forcing them to do things - when you seen that __ was not capable, or was not progressing in the books that he had, you found some that he could.
> Interviewer: Yes
> P9: To me that was saying your child is worth every bit of this.
> Interviewer: Yes
> P9: It's worth, you know, you were saying, " __, I think you are worth saving. You are worth seeing you get a diploma." And that meant an awful lot to me as a parent. . . that you would take the time . . , not just to make him understand what he was doing in those books . . .but find something that he could do well.
> Interviewer: Yes
> P9: And he could really see how, you know, he was improving and progressing, and I think he has done that.
> Interviewer: Good
> P9: You made __ feel like the he was really somebody, really worth his learning all this, or teaching all this to. . . . I have seen his self-esteem. (P9)

In looking at the above dialogue, one can see clearly that her child's progress and self esteem were important to Parent nine. Her child had chosen to go on homebound rather than be expelled for fighting. When the homebound teacher expressed to the student and the parent a decided distaste for fighting, Parent Nine was afraid that the relationship between student and teacher would be a negative one. Several times throughout the interview, she expressed her relief that the teacher and the student were able to establish a positive working relationship; and she expressed

her appreciation for her child's academic progress and resulting self-esteem.

Like Student Nine, Student Two was initially skeptical about establishing a positive relationship with the homebound teacher. Before her illness forced her to go on homebound, at her school the student had been in an extended study session which had been supervised by the homebound teacher. In that session, the student had seen the teacher correct a student rather sternly. Shortly thereafter, the student realized that this same teacher would be her homebound teacher and expressed to her mother her fear that she and the teacher would not be able to get along. Both she and her mother expressed relief that the homebound teacher was "nice." The mother said, "I really appreciate your niceness."

In a similar way, Parent Four expressed her concern that the homebound teacher be the kind of person with whom her daughter could relate in a positive way.

> P4: I came home the day that I met you at school, and I said, "____, she is really nice." I mean here she is, you know, having to put up with whatever you were going to be like.
> Interviewer: Exactly.
> P4: I know she was kind of wondering, you know, what the teacher is going to be like, you know, so I said, "____, she's nice; you'll like her.
> Interviewer: (To the student) You were afraid there would be a possibility that you would get a teacher that you wouldn't particularly like?
> S4: I didn't know (P4, S4).

Finally, Parent One said,

> Well, I thought you had a nice personality, and you were able to come in and get along with __ even though she was sick. And you helped her (P1).

Such a concern closely relates to the premium that some parents placed on the hope that the person teaching homebound would be a nice person. It also relates, again, to parents wanting to provide an atmosphere that would be conducive to their children's success in school. Parent One mentioned the homebound teacher's nice personality. She seemed glad that her child and the homebound teacher had a good relationship.

After looking at the above dialogues, on could infer that the hope for a positive homebound teacher is a reaction to an unpleasant relationship with a classroom teacher. One could also infer that a pleasant person coming to the home to bring assignments is important, perhaps, because the family has had to adjust to the student's feeling ill and uncomfortable or to the student's being in trouble as in the case with Student Nine. In the face of such stresses, a pleasant person who makes school work pleasant would be a welcome respite from the stress of adjusting to illness and absence from school.

Interviews with Students

After interviewing the parents about why they put their children on homebound and what they believed to be the advantages and disadvantages of the program, the writer interviewed the students. Using the guidelines for student interviews found in Appendix B, the interviewer asked questions that fell into basically three categories: situational factors, school factors, and study skills factors, the last of which are at the heart of the study. Before discussing study skills, the writer addressed situational and school factors with the students, asking them about their homebound experience in general. By definition, situational factors relate to the homebound situation in general, how their friends and family helped them, how the students compensated for their illness or injury, problems faced at home. School factors relate to the student's relationship with the homebound teacher, the kind of study routine the student used, how homebound affected their self-discipline, comparison of homebound with regular school (discussed in terms of advantages and disadvantages of homebound) and problems of adjustment after returning to the regular classroom. These questions are appropriate because often the context in which the students studied had a direct impact on the success of their effort.

Friends' Role

As was discussed above, homebound students missed their friends. Directly related to the homebound student's missing her/his friends is the role that those friends played in helping the student complete his/her assignments and keeping in touch with activities at school. In response to this question, Student Three said that before she went on homebound, her friends brought assignments to her from the teachers they had in common with her. She also phoned a friend in her Spanish class for help with an assignment if she had trouble with it.

Student Four did not have many close friends in her classes. She did have a friend in history class who told her that the class was working in the same chapter that had been assigned to the homebound student.

Student Five, a sophomore, said

> I had seniors over and stuff, and they would be more than happy to help me if I wanted them to, but I just never really asked them. I just wanted to visit with them.
> P5: Didn't __ help you with your algebra?
> S5: Yes. She's pretty smart (S5).

Student Seven, the quadriplegic, who had a number of assignments involving the use of educational television and tape recorded responses to the programs, relied on his girlfriend to help him manage the electronic equipment.

Student Eight relied on his girlfriend to motivate him.

S8: My girlfriend, Gina, she helped, you know, making me do it.
Interviewer: What do you mean? She was the motivator?
S8: Yes. She'd sit there and say, "Just do it and get it done, you know and that will be it.
Interviewer: She didn't help you with the assignments?
S8: No, she was more, like I said, a motivator. My friends, no, my friends in school and everywhere, they have never been, you know, I have never needed them really to help me do the work. I might need them to help me understand but not really do the work (S8).

Parents' and Siblings' Help

Parents and siblings also often played a direct roll in keeping in contact with the school about non-instructional matters. For example, parents and/or siblings of the seniors ordered graduation announcements and caps and gowns.

Parents also helped students complete their assignments. For example, Student Three suffered from a kind of herpes virus that had invaded her inner ear. As a result, she suffered from dizziness when she tried to read or write. However, she was not deterred; she dictated her written work to her mother. Her mother also read to her when reading made the student too dizzy. The following dialogue transcribed from the taped interview is a clear example of a parent helping her child to complete her assignments in the face of an illness that had great impact on her ability to study.

S3: I couldn't keep my balance so my mother typed

it [the paper] for me after I told her, you know, what to write down.
Interviewer: You had trouble writing?
S3: Yes. My eyes bothered my vision as I followed around.
Interviewer: So, as you moved your eyes, it caused you to be dizzy?
S3: Yes.
Interviewer: So you'd dictate things to your mother and she wrote them down?
S3: Yes
Interviewer: She was your secretary?
S3: Basically.
P3: That was the only thing I could do to help her, and I read Medea to her. I had enjoyed it, and we had read on it already and we discussed it together (S3, P3).

In addition to working with their children, parents also made an effort to motivate their children to complete their assignments, but sometimes their efforts met with resistance, as seen in the dialogue below with Student Three and her mother.

Interviewer: Does you mother encourage you to work and to stop putting things off?
S3: She tries.
Interviewer: It doesn't work?
P3: I told her last night we had the same disease. I procrastinate too (S3, P3).

Parent Two had a similar problem motivating her child. That was why, as discussed above, she put her daughter on homebound. "She would be better off being supervised by somebody else other than me," she said. (P3)

Parent Four said that she did not have to push her daughter at all. Parent Five had a similar experience.

> P5: I didn't stay on her much. She just did it because she did have a lot of time. . . .I was minimally involved, you know; there wasn't a lot that I helped her with or anything. She just did it (P5).

Parent Six also found that she did not have to push her daughter.

> P6: She is pretty much independent when it comes to her work. I always make sure she has it all done before her teacher comes, but she is always ahead of me. You know she usually gets it at night, because she can't sleep. She can't go to bed on time like she should [The student was on medication that sometimes kept her awake at night until the physician adjusted the dosage]. . . .She does her homework. . . .I've never had to be on her about doing her work (P6).

Student Eight said that his mother helped him by "pushing me all the time." He also said that his mother would go over an assignment with him if he did not understand it.

Self-discipline and Scheduling the Day

When students were asked how they scheduled their day, they gave a variety of responses. Some students found it difficult to discipline themselves, structure their time and finish their assignments before the homebound teacher came Student Three missed the structure and the incentive to work that the regular classroom offered her.

It's [her assignments] not due the next day and so I need to get myself to do it in the same day. . . .I'll put off probably until tomorrow if I can do it tomorrow instead of doing it today when I need to do it now.
Interviewer: So, if you don't have it due immediately, you are saying that you won't do it?
Student 3: I prefer putting it off until the last possible moment. It all piles up at the very end, and when it's finally due, it's all piled up.
Interviewer: So you had problems in disciplining yourself to do your work in an organized way?
Student 5: Step by step instead of all at one point (S5).

Student Nine had a similar reaction. However, once he became accustomed to being on homebound, he developed the self-discipline he needed to complete his work. When asked how homebound was different from regular school, he and his mother discussed his self-discipline.

P9: Making yourself do. Remember you said that was hard at first.
S9: Yes . . . making my own self do it instead of having somebody pushing me doing it.
Interviewer: So you had to be your own disciplinarian?
S9: I didn't have somebody telling me, "You need to do this, you need to do that." I was told this is what I needed to do in the time that you would come and I would have to be responsible to do that. And that would help me. Because it has helped me a lot doing that. . .It has made me more responsible. . . It was either do it [the assignments] or no grade (P9, S9).

Student Seven had his day scheduled for him by the schedule of the educational television programs. If, however, the program conflicted with other commitments such

as physical or occupational therapy, his mother or his girlfriend taped them to watch at a later time.

Student Eight was on homebound for almost six months. He slept very late and worked on his assignments late at night.

> Interviewer: So did you have a routine that you and your mother followed about doing your assignments? Did you say I am going to do history at nine a. m. -
> S8: Nine?
> Interviewer: (laughing) You probably didn't get up at nine. (laughter) Did you say "I'm going to do history at one p.m., English at two p. m.?" Did you have a set schedule?
> S8: No. I just did whatever was - whenever I picked up the book. The first book I picked up, that's probably the one I am going to do first.
> Interviewer: You said that you waited until the last minute so you would say, "She's coming tomorrow, I'd better do it tonight?"
> S8: Yes. That's it, you know, well, I would think, well, she's coming tomorrow at three so I'd better do it now because I am not going to be able to get up in time. I'll get up just when she arrives.
> Interviewer: So you didn't have a schedule as such?
> S8: No.
> P8: I look back on it now, especially since one of the questions pretty much pinpointed it, I think that if we redid our thinking, we should have come up with a time that at 6:00 in the evening or 4:00 in the afternoon that was the time to do homework. We look at it now, him and I have discussed it. You know, he did much better with somebody either the day that you came or if I was to say okay at 8:00 let's start your history. I might have sat here and read a book, but he would be the one that could say to me, well how about this? Am I suppose to do this and that and, you know, I could kind of clarify the directions. But I look back on it now and I realize that we should have come up with a set schedule.
> Interviewer: Yes.
> P8: I'm not saying that he had to get up real

early. His reasoning for sleeping late and getting up late was that was when his friends started to come over. Which was true, you know, he had some activity. And you know, 10:00 at night starting your homework was not always the best idea (S8, P8).

Student Five had the same lack of structure. She stated

It was more or less when I had to do it, I did it to get it done.
P5: The teacher was coming in.
S5: Yes
P5: She said, "Oh, she's coming. I'd better hurry and do it."
Interviewer: So did you wait until the night before or the morning before?
S5: Yes, sure.
Interviewer: I see
P5: (to student) You're an educator's nightmare. You know that? (laughter)
Interviewer: I think many of us are like that, to wait until the last minute.
P5: We do for everything (S5, P5).

Unlike Student Eight above, Student Nine seemed to have a little more structure to his day.

S9: Every morning I get up and I do my written work first and get all that done one day. Then the next day I would go to my reading and get it all done, and then the next day I would start studying for my tests. I guess I would study for an hour or an hour and a half every day doing my work (S9).

Student Six was also able to use her time wisely. She stated that she was a self-motivator.

> I have been pretty good at motivating myself. . . If I have an assignment to do, I like to get it done. I like to be on time with my assignments. I like to have my work finished (S6).

Student Two was also able, finally, to discipline herself to finish her work on time; but it took a week of procrastination before she developed a routine.

> S2: The first week I waited until the very last day to do it, and then the next week I just took the assignments in a row, like English one day and then algebra and geometry, and just concentrated on math rather than the whole thing for that day.
> Interviewer: So the first time you waited until the last minute, you decided that was not going to be effective and you didn't want to put yourself through the stress?
> S2: Yes. I am just taking one book and just going through that in one day.
> Interview: And nobody helped you figure that structure out? You just did that on your own?
> S2: Yes (S2).

Student Ten seemed to have little trouble scheduling his time. He wanted to be able to say to his parents and to his teacher that he not only had the assignment finished, but he sometimes would go ahead to the next chapter in biology, for example. He said he wanted to "get ahead of everybody. There's nothing else to do."

Unlike Student Nine who did his work in the mornings, and Student Ten, who finished by the end of the day, five students liked to sleep late in the mornings and work at night when they seemed to have more energy. In fact,

Student One stated that sleeping late was one of the advantages of being on homebound.

Influence of Illness on Effort

As is seen above, a factor in scheduling their work was the effect their illness or disability had on the students' endurance. Three of the students had mononucleosis, which caused them to tire easily. Student One said that she would work until she got tired, put the work away and lie down. Student Two also worked her schedule around the fatigue of mononucleosis. She felt better in the evenings than in the mornings and, thus, chose to work after supper. Student Ten also fell into a routine of working for a time and resting for a time.

Student Three had a viral infection that affected her inner ear, a malady that resulted in feelings of dizziness and nausea when she tried to read. As was noted above, her mother read to her because she could not read the assignments for herself.

> P3: Even when she was as still as she could be, she was nauseated, too.
> Interviewer: (to the student) Because your inner ear was affected by the disease?
> P3: We finally understood that it was affecting the nerve.
> S3: It was going through my inner ear, and it threw off my balance (P3,S3).

As discussed above, to compensate for her disability, the

student asked her mother to read to her and to write down what she dictated to complete her written assignments.

As a result of a broken pelvis sustained in an automobile accident, Student Four was constrained to sit for long periods of time with her legs elevated. Thus, she did all of her work sitting on the couch, but stated that such an arrangement did not seem to be a handicap.

Student Five had gall bladder surgery, but began to recover nicely when she came home from the hospital. Her illness had little impact on her ability to complete her assignments.

Student Six had been on homebound instruction several times for a variety of physical and emotional maladies. When asked how her illnesses had interfered with her attempts to complete her assignments, she stated

> Well, when I had an ulceration of the throat, I was down and out and couldn't even really lift a pencil, you know, because I was so weak and everything. I got as much done as possible while I was sick.
> Interviewer: Yes.
> S6: There was a lot of times when I just couldn't concentrate. And still yet I have some problems of not being able to concentrate for so long a time.
> Interviewer: So how would you compensate for that? Would you just stop and come back to it later?
> S6: Yes, just do what I can at the time.
> Interviewer: While you felt like doing it?
> S6: Yes, and if when, you know, when the feeling would change, you know and I would get real depressed or just lose concentration completely, then I would quit for the night and then try the next day, and just keep doing that until I got it

completed (S6).

Student Seven, a quadriplegic, stated that his inability to write was the greatest problem. His paralysis prevented his holding a pencil, a sheet of paper or a book, so that all his work had to be done orally.

> Interviewer: So you have your mother or ____ [the student's friend] take notes for you?
> S7: Yes. . . . We jot the notes down and then we rewrite it and state it into the tape recorder.
> Interviewer: And so you are involved orally in all that activity? . . .You contribute to what gets written?
> S7: Yes (S7).

When Student Eight was asked about whether the pain of his broken hip interfered with his homework, he said that it did not interfere because, "You sit at school and I sat here." Thus, his injury was "not a factor" in the completion of his assignments.

Ironically, Student Nine, who chose homebound instruction for disciplinary reasons, broke his leg about a month after he went on homebound, and thus had an injury that could have impacted on his ability to work. However, because the broken leg kept him relatively immobile, it kept him in one place for longer periods of time. As he said

> I had more time to study then, because I wasn't going nowhere, so I was here studying.

Interviewer: Were there times when you were working on your assignments that you just started feeling rotten and quit?
S9: Yes, there was plenty of times. My leg would start hurting and I didn't feel like working, so I would just lay down everything.
Interviewer: But that didn't keep you from getting your assignments done?
S9: No (S9).

Student Ten, who suffered from mononucleosis, said that when he "got real tired, "I'd just lay down on the couch for a while until I felt better" (S10).

Problems at Home That Interfered with School Work

When asked about factors at home that interfered with completion of their assignments, students responded in a variety of ways. Student Three said that cats, cars, and doctor's appointments often interfered with her studying.

Interviewers: When you were working on your Spanish a minute ago the cat started climbing on your leg, so do cats interfere with your work much?
S3: They find something to ride one, something distracting, so I would like them out of my room
Interviewers: Did anything else besides the illness and the cats interfere with getting your assignments?
S3: There was, like, noise of passing cars that was driving me crazy because I work in my bedroom and the window is right in there and any kind of noise at that point gave me a headache and a kind of river beaded back in my head and that hurt and having people coming in and out of the house.
Interviewer: Yes.
S3:. . .If I could have isolated myself I probably could have done a lot better.
Interviewer: So other than the cats, the main interference in getting your work was your illness

and your procrastination, right?
S3: And so many doctor's appointments that I had to keep going to.
Interviewer: Well, gosh, you have been to a number of them, haven't you.
S3: I've been to a lot of them in the last three weeks (S3).

Student Eight found procrastination and visiting friends a hindrance to the completion of his work. He said

If friends came over to visit, I would put it off. They wouldn't come over until the afternoon and then I usually got up and then did it because I didn't want to do it, you know, when people came over. Or I would wait until late that night to do it. (S8)

Student Nine found that his father interfered with his assignments. The father worked out of state for months at a time and was not actively involved in the student's daily routine. When the father did come home for a visit, as the student said

He wouldn't realize the schedule that I was going through to get my work done.
Interviewer: Yes.
S9: And he would have me do it at different times, you know, I mean my work schedule was usually from 8:00 in the morning until 2:00 in the afternoon. And I would work during that time, and then my free time comes after two. And he would make me work and that would interfere with it [his schedule] and that's what hurt me.
P9: Right. He would say, "Well, come on, _____, help me today. Your teacher is not coming. Well, you've got time to do that tonight." And would not want to do it at night.
Interviewer: (To the student)Because you felt like

you worked better at it in the day?
S9: Right.
Interviewer: And you would have to negotiate all that.
S9: Right (S9).

Student Ten stated that since he worked during the day while he was home alone, nothing interfered with his work except "feeling bad."

Interviewer: So, you didn't watch t. v. during the day?
S10: Ain't nothin' on but them ole soap operas and game shows. I don't like them.
Interviewer: Oh, so you've already checked out the programs and found out you didn't like them.
S10: Yeah (laughter). So - nothin' to do but your work (S10).

Study Skills Factors

The heart of the study is the section on students' use of study skills. Questions about study skills addressed four broad categories: pre-reading skills, interaction with the text, extension activities, and other activities. A summary of the study skills that each student used is found below. The discussion will be organized around the responses of each student and, if applicable, comments made by parents. It will not be organized around study skill categories because often in the discussion, participants discussed a number of different skills in the same sentence or utterance, thus, making it awkward to isolate those skills from the conversation.

Student Profiles

Six of the students were enrolled in the high school on the west side of the county and four of them were enrolled in the high school on the east side of the county. All the information on the students is taken from raw unpublished data (1990) in the files of the East Tennessee county school system in which the students were enrolled

Individual students' use of study skills

Student One

Race/gender: White Female; Grade: 9th

Diagnosis: mononucleosis; Grade point average: 3.0

Number of days on homebound: 27; Enrolled: 09/29/89

Student One said that mentally sometimes she would ask "What do I need to know and how am I going to know it?" However, she never put such a question or its answer on paper; she simply used this technique as a "mental exercise." She also summarized what she read in science

> because I hate science, and I figured I wouldn't have to go through and read it twice. I would jot down what I thought I needed to know.
> Interviewer: Well, tell me about the kind of notes you would take. What would you write down and how would you decide to write it down?
> S1: I would read a paragraph and then decide what was the main idea of it and then write a sentence about it (S1).

Student One also went on to say that she answered questions

at the end of chapters in her textbook both because the teacher assigned them and because they helped her understand the content. She also "every now and then" gave herself a test at the end of the chapter as a way of checking her own understanding. When the interviewer asked her if she had ever used anything she had learned in a practical way, the student said that once when her family was in Florida, she heard some people in a restaurant speaking Spanish and she was surprised to find that she understood them.

Student Two

Race/gender: White female; Grade: 12th;

Diagnosis: mononucleosis; Grade point average: 1.89;

Number of days on homebound: 21; Enrolled: 05/08/90

Student Two did some pre-reading activities. She said

I just went by the guide that I learned from Ms. __ [her English teacher]. Like when you are in the introductory before you completely read it, read the first sentence and the last sentence, write down what you think it is going to be and then read the whole thing.
Interviewer: This is like an introduction to a specific period of British literature?
S2: Like World War II poets. I read the introduction, . . .then I take the first sentence and the last sentence of every paragraph and the introduction and write about in one sentence what I thought the paragraph was really about and then completely read it and see how close what I thought was. And if it was, to keep my notes, and if it wasn't, to write down what I remembered.
Interviewer: So you did kind of a pre-reading and pre-writing?
S2: Yes
Interviewer: Then reading, post-reading and

writing?
S2: Yes.
Interviewer: And that was explained to you by your English teacher?
S2: Yes. . . .It made it a lot easier for me. She explained that to me since I kind of had a hard time being able to keep my mind on something that maybe if I just skimmed through it real fast that maybe it would help.
Interviewer: Well, that's interesting. Did any of your other teachers give you that kind of advice, in chemistry, say?
S2: No
Interviewer: So what kind of writing did you do in chemistry? Any?
S2: Just the assignment sheet that she sent to me and just vocabulary words.
Interviewer: So you'd write the vocabulary words and the definitions?
S2: Yes.
Interviewer: You didn't do any kind of outlining?
S2: No.
Interviewer: Did writing on those assignment sheets and doing that vocabulary work, was that helpful in understanding the chapter?
S2: No. It never was. . . .I guess if she had made me skim through it and find the sentences with the word and taken from the book, but she didn't.
Interviewer: Did you ever try that in chemistry?
S2: No.
Interviewer: Why?
S2: I just, well, she never said anything to me about it. She would just tell me to write the definition and get them from the back of the book and I mean I just go by what they say do. . .If she had told me a guide to go by, I would have went by the guide, because I usually just keep going in the pattern that I have always been taught to go in.
Interviewer: And you weren't going to do that [the method taught by her English teacher] in chemistry because Ms. __ [the chemistry teacher] didn't suggest it?
S2: Yes.
Interviewer: Do you think it would have helped you understand chemistry if you had tried the method your English teacher taught?
S2: It may have, but I don't think I would have paid that much attention to it anyway because chemistry has never been, science and math have never been one of my best subjects. And English

and history are my best subjects (S2).

In this discussion, one can see the student using a number of study skills. In keeping notes and trying to see what she remembered, she was using a kind of self-assessment, a sort of metacognitive approach to find out what she knows and what she needs to know. She is also using predication skills, "write down what you think it's going to be." Additionally, reformulated the ideas in the text by stating them in her own words.

The writer notes that the student used study skills involving previewing, post-reading, and writing skills in English because her English teacher taught her how to use them and because the student found them to be effective. However, those skills did not transfer when she was reading chemistry because the chemistry teacher had not guided her to use them. As she said, "I just go by what they [the chemistry teacher in this case] say to do." Yet when she talked about the reading she did in art, Student Two said that in art, she used the study skills that she learned in English.

> I would read about his [a painter's] work and study the picture and see what I thought about it. And then I would read about what the picture really was about and see how close I was. I would try to associate what Ms. __ [her English teacher] taught me.
> Interviewer: You'd look at the picture. Figure out what you thought that picture meant and what it was all about and then you would read about it?
> S2: I was usually never close (S2).

Here again, one sees prediction skills. Apparently the technique worked better in English than it did in art. The student did not explain why she used one technique with art and English and another with chemistry.

In addition to the above, she did summary writing or personal essay writing in English and art to help herself understand the content. She also did vocabulary work in French in which she wrote translations. However, based on the context of the sentence, she would guess at the words she did not know because she felt that the teacher would not read her translation. When the interviewer asked her how often her guesses were correct, she said, "Quite a bit, I guess."

> Interviewer: Well, if you came upon a term in chemistry could you do that? [guess from the context]
> S2: I don't think I could have.
> Interviewer: Why? What's the difference?
> S2: It's just that French . . .is not as hard as chemistry. And if you don't go through and learn chemistry, it is harder and you will never be able to remember it if you don't. I mean, you can remember French. Well, I think French is a lot easier to remember than chemistry to tell you the truth. I mean, the only thing I really remember about chemistry is the chemical formula for water and that's H20 (S2).

From these comments, the writer infers that the student applied the study skills of previewing, predicting, post-reading, and using context clues to English, art, and French because she enjoyed those subjects and was willing to expend

the time that is required by these study skills. With chemistry, on the other hand, she seemed eager to get through it as soon as possible. This is an interesting contrast to Student One's reason for summarizing her science reading; as she said, she hated science, and she did not want to have to read it more than once.

Student Two also answered chapter questions to help her learn from the text. She found that adjunct questions were easier to answer than questions at the end of the chapter

> because then you just have a few at a time like maybe three or four at a time that you can answer on about maybe four or five paragraphs.
> Interviewer: Does knowing you are going to have a test help your understanding?
> S2: Yes.
> Interviewer: Why?
> S2: I know I have to know it. If I don't have a test I don't have to know it.
> Interviewer: So, that's kind of an external motivator, isn't it?
> S2: Yes.
> Interviewer: Why would you study if you didn't know you were going to have a test?
> S2: Well, there's this girl that sits behind me in chemistry and we just always call it being nosy about what we were assigned. We would go through it and see and we would learn things just by goofing off doing it. We would just go through and see how many things we knew.
> Interviewer: This was a game?
> S2: Yes, and sometimes we would have a race to see who could pick out the most stuff.
> Interviewer: Competition with a buddy?
> S2: Yes (S2).

It is noteworthy that this student studied for a clear purpose. As Marshall states, "Without a rational purposes

for engaging in the learning situation, little learning is likely to occur because students will not pay attention" Head and Readence (1986) state, "Satisfying purposes is what reading is all about. However, students must be motivated" (p. 229.) Student Two was motivated essentially by two purposes;either she wanted to do well on a test or to keep up with a friend. In both instances, she was facing a need to perform well, either for a good grade on a test or for a respectable performance with her friend.

Student Three

Race/gender: White female; Grade: 10th

Diagnosis: herpes zoster; Grade point average: 3.0

Number of days on homebound: 9; Enrolled: 05/24/90

Like Student Two, Student Three took notes on her reading based on what she thought the teachers would ask on a quiz. As she said,

> By what I know of each teacher how they asked questions, I can take notes as to what I think they will ask. Ms. __ [English teacher], she often asks her questions on a higher level, like what caused Medea to do something like that so I would understand, and when I see something like that I think she will ask I write it down and that way I have it.
> Interviewer: Do you write it down word for word or do you paraphrase it?
> S3: I paraphrase it because if I wrote it word for word then I won't have any basis to judge it by.

Here, one sees that Student Three is using prequestions

and self-questions. She is also predicting what kinds of things the teacher will expect. Finally, in wanting something to compare to the text, she is using a kind of self-assessment.

> Interviewer: In which subjects do you take notes the most?
> S3: English, biology, and civics. In civics I make an outline of the chapter because it has, you know, information, facts you have to know, not just questions, you know, might be received or you might have.
> Interviewer: So you write down the main idea and then the subheadings under those?
> S3: Yes.
> Interviewer: Did Ms __ [civics teacher] teach you how to do that?
> S3: She outlines it on the board for the whole class, so it helps us organize it, and putting my little marks to the side as to what I think is important about it helps me organize it better, you know, even than she does.
> Interviewer: And so on the left hand side of the page you put your ideas or concepts that were in the book and on the right hand side of the page you put your own comments?
> S3: Yes.
> Interviewer: So it's a form of what we call split page note taking where you have part of it on one side and part of it on another. Did you devise that?
> S3: Yes.
> Interviewer: How does it help you?
> S3: The outline is what the book gives. It describes the proper way to organize your information, and my notes help me to understand that this is what I want to know. This right here is not important but I might need to know it on a little test (S3).

The writer notes that Student Three learned from the civics teacher's modeling of outlining. In addition, using her "little marks" she is using a kind of contextual

annotation. Also, the student says she devised her own split-page notetaking strategy. As discussed above in Chapter II, Walter Pauk originated the split-page method, but it appears that Student Three came up with the idea on her own, or at least she thinks she did. She may have learned it on her own or a teacher may have taught it to her so long ago that she forgot where the technique came from. In any event, if the student did devise her own method of split page notetaking, such creativity indicates the power that young people have to invent strategies that work for them, even if teachers do not teach them.

The student also took notes on Spanish in a way that the teacher advised her. At the beginning of each section in the book was an essay in English about some aspect of Spanish culture. Along with the essay were adjunct questions which the student answered as she read. However, because the teacher sometimes asked "sneaky questions" on quizzes, the student would go back and look at the "nitty gritty" because

> I have to figure Ms. __ [Spanish teacher] out. I'm in Ms __ brain, and you say what would they ask? If I was Ms. __and I was going to teach this class what question would I ask? . . .It works (S3).

In this statement by Student Three, we see the use of self-questioning. On gets the sense that she devised this technique on her own, countering Gillespie's argument (1990)

that students will not use self-questioning unless it is taught to them.

> Interviewer: Have you found that taking notes on your reading is more helpful in understanding the text than just reading it without writing anything down.
> S3: Yes. . .With the notes I can go back over it without having to read all the little stuff that is not important. I can look back over what is written down, directly and just before the test I can give it a last glance and there I have it again without having to read the whole chapter looking for one little thing (S3).

Once again, like Student Two, Student Three was interacting with the text in order to do well on a test. However, in biology, health, and geometry Student three did not take notes on the reading because the teachers did not instruct her to do so.

In vocabulary work, Student Three and her mother seemed to feel that writing down the words was a kind of imaging. Of that process, her mother said,

> P3: I think it [writing words] imprints in your brain. . . . I mean it writes it or something. I also wrote my spelling words out.
> S3: It helps me because not only are you seeing it again, but because I can look at that and I have had an incidence where I couldn't remember what the word was but I could see it, you know, kind of close your eyes and you could see the word and just write it down. . . If you forget how to spell it, there it is . . .like a picture image (P3. S3).

Such comments relate directly to the idea of motor imaging, "a vocabulary introduction strategy that emphasized linking motor associations to word meanings" (Manzo and Manzo, 1990, p. 609).

Student Four

Race/gender: White female; Grade: 11th;

Diagnosis: broken pelvis; Grade point average: 2.33;

Number of days on homebound: 17; Enrolled: 5/14/90

Most of the writing from reading done by Student Four was in the form of answering questions at the end of the chapter or on work sheets. The student stated that such activity helped her understand the material better, "because you have to go back and look. You can't just go back and look at what you have read." She did say that adjunct questions interspersed throughout the chapter were more helpful than questions located all at the end of the chapter "because it is easier to do a little bit and answer some questions. I don't know why." The effectiveness of adjunct questions as mentioned by this student and others compares with the studies done by Graves and Clark (See Chapter Two above), who found that adjunct questions help to increase comprehension among low achieving adolescents.

Like other students mentioned above, Student Four also wrote definitions of vocabulary words in economics, and she asserted that writing definitions helped her understand the

material better than doing work sheets, "because after you [I] have read it you're reading the definitions and you're understanding better what it's talking about." (S4)

In history Student Four did some informal outlining using "little subheadings and stuff and all the bold face print, the ones that's in black" to decide what she should write down. Yet, she did not feel confident with this method unless the teacher specifically told her what to write down. As she said, "I'm not a good note taker unless I know what to write down." This lack of confidence seemed to arise out of some confusion she had experienced in class when the teacher, who, according to the student, had not taught the class what kind of approach she wanted them to use, and had become angry with the group when they had not taken any kind of notes at all. Such a negative experience had affected the student's confidence in her ability to take notes in a way that would please the teacher.

Student Five

Race/gender: White female; Grade: 10th;

Diagnosis: gall bladder surgery: Grade point: 2.42;

Number days on homebound: 31; Enrolled: 1/19/90

Like others who were interviewed, Student Five did some outlining in a kind of selective reading wherein she attended to the bold print of the textbook to help her determine the main ideas. As she said

> I usually just read around the bold print and that's all I would read. I wouldn't read the whole chapter. I would just like go through and look at it.
> Interviewer: So you would just read the topic sentence?
> P5: Hey, listen, I do that, too. Because it's usually just babble they are doing out there to fill the page to fill the book.
> Interviewer: Oh, so we have a chip off the old block (laughter) (S5).

While the last comments by the parent and the interviewer are humorous, they do show how a parent's approach to completing a task could have a direct bearing on how the child approaches a similar task.

When Student Five was asked if she did any other kind of writing related to her reading, she said "No, the least amount of writing as possible." She did, however, do some underlining, but she said that it wasn't really effective in helping her understand the text. She also used what could be called a modified SQ3R technique by which she would "do some questions just to try to get ahead or think and see what it was all about." When asked what kind of study method helped her the most, Student Five said that outlining and defining terms were the two most helpful techniques because most of the learning in each of her classes centered around vocabulary.

In learning vocabulary, Student Five not only wrote the definitions; she tried to use the terms in a sentence. She stated that this helped her more because she used the word

in some kind of context. Student Five also said that she read her assignments into a tape recorder and then played it at night while she slept. When the interviewer asked her if it worked, she said that she did not know.

Student Six

Race/gender: White female; Grade: 10th

Diagnosis: depression; Grade Point: 1.73

Number of days on homebound: 96; Enrolled: 3/20/90

Student Six had been taught the Cornell or split page method of notetaking. She found it effective because

> it's organized and it's helpful, and I think notes should be organized where you can understand it. . . .If I was to be taking notes on my own, that's what I would use rather than outlining. . . .I don't really feel comfortable with outlining because it is not specific (S6).

While this student found outlining confusing, she found answering chapter questions helpful. With some insight, she considered "the questions during the chapter and after the chapter the same as the objectives" of the chapter. She went on to say,

> I don't go read the chapter before I read the questions. I read the questions first and then go look for the answers. That's easier for me than to read the whole chapter. It's more confusing, I think, to read the whole chapter and then read the questions. I, you know, read the questions and then get the answer.

> Interviewer: Is it easier to have the questions dispersed throughout the chapter . . .or is it easier to have a bunch of questions at the end of the chapter?
> S6: To have the questions throughout the chapter makes it easier. You learn step by step. (S6)

Like others, Student Six uses the questions to preview the reading. She also expresses a preference for adjunct questions over questions at the end of the chapter. Such a preference corroborates the finding in the literature that adjunct questions are effective.

Student Six also worked best alone. She wanted help only when she sought it.

> Interviewer: So it doesn't bother you that we didn't go over each part of the chapter in each of your subjects?
> S6: No, as a matter of fact, it is easier on me.
> Interviewer: To just be left alone?
> S6: Yes, basically just to be given the assignment and do it. . . . It's a whole lot easier I think (S6).

This desire to work alone compares with this student's resistance to being pushed or put under pressure. She stated that she does best when left to finish an assignment in her own way. When the interviewer asked what she did when she came to a section that she did not understand, the student said that she either called a friend or waited until she could ask the homebound teacher. Student Six also used television and radio to complete assignments in a course

called Current Issues.

Student Seven

Race/gender: white male; Grade: 12th

Diagnosis: quadriplegic; Grade point average: 1.32

Number of days on homebound: 48; Enrolled: 3/22/90

Student Seven was the most severely handicapped of all the students interviewed. As is stated above, he was left a quadriplegic as the result of an automobile accident. For him, oral recitation and summarizing were a key study skills. Because he was unable to write or to hold a book, he did all his work orally with the help of his girlfriend and his mother. Many of his assignments, especially in history, mathematics, and English were directly related to educational television programs. His assignment was to watch those programs and respond to them using a tape recorder. The strategy he and his loved ones devised involved their watching the program together and then discussing it with either his mother or his friends taking notes. As he said,

> We write it [their ideas about the program] down and then we rewrite it. We just jot the notes down and then we rewrite it and state it into the tape recorder.
> Interviewer: Is not being able to write, does that interfere with your ability to learn in your opinion?
> S7: Not as long as it's oral. I believe I could learn it.
> Interviewer: You've done some reading in

psychology and adult living. What methods do you do to remember that? Do the questions at the end of the psychology chapter help?
S7: Yes, a little. Taking notes a little bit.
Interviewer: Who takes notes for you?
S7: Mom and __[his girlfriend]. Of course they have to hold the book for me when I read.
Interviewer: Do you all take notes as you go?
S7: Yes (S7).

Student Seven also said that the notes he and others took were organized around subheadings in the chapter which they used to make an informal outline of the content. He also echoed the theme that others have discussed; he studied harder when he knew he would have a quiz. In studying for tests, Student Seven said that questions at the end of the chapter helped him to remember the content.Like others, Student Seven studied for a clear purpose.

Student Eight

Race/gender: white male; Grade: 12th

Diagnosis: broken hip; Grade Point Average: 1.92

Number of days on homebound: 99; Enrolled: 11/15/89

Student Eight preferred simply to read something "completely than just to pick out the important things." This method seemed to be his most frequently used strategy. From the context of the interview, the writer inferred that Student Eight had a need to read the whole assignment first to get a sense of the content before he could effectively study the main ideas or the details.

> Interviewer: Did you ever do an overview of the chapter, saying, "These are the major ideas in this chapter" before you started to read it?
> S8: No.
> Interviewer: So you would start from the beginning?
> S8: Start from the beginning and go to the end.
> Interviewer: And you never did any pre-reading survey of the chapter first?
> S8: No. If anything, I would skip ahead and find out what happens to somebody at the end. . . . If I read so much outline, that gives you the like the meat and potatoes of the story but it doesn't give you the whole story. And I would rather have the whole story - more than just the important parts. Because what's important to somebody may not be as important to somebody else you see (S8).

One could infer that Student Eight was not satisfied with just the details, the "meat and potatoes." It is possible that he wanted to read more on an inferential level than for mere comprehension.

To check for his understanding, Student Eight said

> I would say I need to remember the beginning, half way through the middle and then the end. I remember that because that's the most important parts I thought (S8).

He also answered adjunct questions and questions at the end of the chapter when they were assigned. Had they not been assigned, he said he would not have answered them. He also did on occasion outline a chapter in history if the teacher assigned the outline. In fact almost all the study skills he used were the result of the teachers' direct request that he do so, and, like most of the other students interviewed, he

would follow instructions, particularly if he knew he was being tested on the material. He did some writing which usually took the form of summaries or paraphrases; but, like Student Four, he stated that he was not a very good note taker. He seemed to assume that notes consisted only of writing down details from the text and had little to do with his own interpretation of it.

In addition to textbooks, Student Eight used the video cassette recorder to watch a production of Macbeth as he read the play. Other than that, he simply used textbooks or handouts brought by the teacher.

When the interviewer asked Student Eight if he had ever applied what he learned in a practical way, he stated that in his reading, he liked to learn new words so that he could use that knowledge to help him understand other selections that might contain those words. His mother also reminded him of the check book balancing assignments that he completed in a course called adult living. She then said with a smile,

> He can fill in my checks real good
> P8: Especially if I sign my name, he will take it (S8, P8).

When Student Eight was asked where he learned the study skills he used, he said he had learned them from his teachers.

Student Nine

Race/gender: White male; Grade: 12th;

Diagnosis: disciplinary action/broken leg;

Grade point average: 1.9;

Number of days on homebound: 120: Enrolled: 11/29/90

Student Nine stated that outlining helped him because writing down key ideas helped him remember the content. However, he did not like "taking notes in an orderly manner" because the process confused him. He seemed to become entangled in the formal structure of an outline, a dilemma that interfered with his comprehension of the text. As a compromise, he would make the outline first to please the teacher and then write notes in his own fashion to study for the quiz. As he said, "Writing it down makes you learn."

In history, he was faced with having to remember names, dates and places for the weekly quiz. Thus, his approach was structured by those facts.

> Interviewer: Remember in history, it seems like we talked about taking notes, looking for the topic sentence of the paragraphs?
> S9: I would look - well, what I was doing, I was taking notes on the people's names and the names of ships and dates and stuff like that. I wasn't going through and taking notes on the whole thing. I would read it and when I would come to a name I would write the name down and then I would read what he did and I would write it down. Do you understand?
> Interviewer: Yes. And then that would help you on the test?
> S9: Right. Because that's mainly where the test

> comes from. I would write down the acts, the Civil Service Act and stuff like that (S9).

Like his peers, Student Nine stated that expecting a test encouraged him to study the material so that he would do well.

Student Ten

Race/gender: White male; Grade: 10th:

Diagnosis: Mononucleosis; Grade Point Average: 2.33

Number of days on homebound: 21; Entered: 4/16/90

Much of Student Ten's work in English centered on the answering of teacher-made questions on Shakespeare's The Taming of the Shrew. He also was asked to answer both adjunct questions and questions at the end of the chapter in biology. He was asked

> When you read an assignment, does answering questions as you go help you understand the assignment, or does it get in your way?
> S10: It helps you because you might not remember the answer [if you answer questions after you read] and you might have to go back to the book to find it (S10).

He was also doing some vocabulary work in English. The assignment approached vocabulary in a variety of ways.

> Interviewer: You have multiple choice, synonyms, antonyms, fill in the blank, definitions and pronunciation. Which one of these activities

helps you remember the definitions of your vocabulary words the most?
S10: The definition.
Interviewer: This is the easiest?
S10: It ain't the easiest, but it helps you understand the definitions better.
I: So when they give the definition and they give a phrase in which the word is used is the most effective way for you to learn vocabulary?
S10: Um hum. Because when you have the definitions test you can remember it. Them other ways don't help you with the definitions.
Interviewer: And you want to do well on the test?
S10: Um hum (S10).

Student Ten also did some outlining; and, when asked whether it helped him comprehend the text, he replied that outlining helped him find the most important points. When asked if he ever did outlining or answered questions without being specifically told to do so by his teachers, he answered no. He also reiterated that he did most of his assignments because he wanted to do well on tests and make good grades. Like others, he had a clear purpose for studying.

Materials Other Than Textbooks

The overwhelming majority of students used only textbooks and teacher made materials in the completion of their assignments. No assignments required the use of encyclopedias. None of the students used them. One student, whose assignment was to watch a video tape of Macbeth, used the family video tape recorder to watch the play. The student who was a paraplegic relied as heavily on

educational television as he did on books. Student Six used the radio and television to hear and view news programs for an assignment in current events. Most students owned dictionaries or checked them out from the school library. In the main, students used teacher made materials and textbooks.

Back to School

Of the ten students interviewed, only four of them went back to school during the 1989-1990 school year after their time on homebound. Of the other six students, three of them graduated while on homebound, and three of them stayed on homebound until the end of the spring semester. (See Table 6 below.) Those three entered the regular school program in the fall of 1990. However, the writer did not follow them up after they entered. The fact that these students continued their education after homebound indicates that the students were serious about finishing their education, a goal which could be seen as the ultimate purpose for all their studying.

The four students who went back to school before the end of the year and their parents were asked about their academic performance after they went back to school. All of them answered that the students' progress either improved or remained the same. It did not decrease. These statements about student progress compare with the responses of

Table 6

Per cent of students who ended the year on homebound and the per cent of students who returned to the regular classroom

Students who graduated on homebound	30%
Students who ended the school year on homebound	30%
Students who returned to the classroom	40%

homebound teachers who were asked about their students' progress when they returned to the regular classroom. Those responses are discussed in detail below.

Parent Five said

> Well, I think it [homebound] instruction helped her because she did well on homebound and then she did better when she went back to school than she had done previously. So, I think it encouraged her to see that she could do well, you know. I think homebound was easier for her than normal school.
> Interviewer: So you think her grades rose?
> P5: Yes. Well, I know they did on homebound. And then when she went back to school they were better too. (P5)

Student One said that her grades did not fall when she went back to school, but she did experience some trouble in English because the regular classroom teacher in English neglected to send assignments. Thus, the student fell behind the rest of the class. However, she was quick enough to catch up with the rest of the class in a short time. She even did well on the semester exam, even though she had been

out of the regular English classroom for 27 days.

Student Eight had numerous problems when he returned to the regular classroom near the end of the Spring semester of his senior year. He had been on homebound for 99 days, over half of the 175-day school year. He stated that the assignments he had done in U. S. History and English IV while he was on homebound did not parallel the assignments of the regular classroom teachers. As he said

> Some of the stuff I hadn't covered and they just assumed and they would just rattle on like on tests and quizzes and everything. Well, we are going to quiz over, you know, the poems we had two weeks ago. Well, I wasn't here two weeks ago. I didn't read those poems (S8).

As a result, he became concerned that he would not be able to catch up with the class in time to graduate. A conference with the teachers, the parent and the principal clarified expectations and resulted in the student's completing the required assignments and graduating with his class.

Student Ten had no trouble returning to the regular classroom. In fact, one of his teachers remarked to the interviewer that he was a little ahead of the other students in algebra. When he returned to regular classroom, his grades stayed the same as they were during homebound.

Summary of Interviews

The above discussion has shown that students used a variety of study skills, many of which they devised for themselves; others of which they learned from teachers. They used those skills to accomplish the purposes of understanding the material, meeting teachers' expectations, doing well on tests, and ultimately finishing high school. Among the most frequently mentioned skills are (1) previewing, (2) predicting; (3) answering adjunct, chapter, teacher-made and self-questions; (4) notetaking which consisted primarily of summarizing paraphrasing, and outlining; (5) vocabulary study.

Predicting and Previewing

Students primarily wanted to predict two things: what the teacher expected either in the way of assignment completion or in the way of a test. They also engaged in previewing that involved looking at the main headings, and activity that helped them to predict text content and to gain an idea of what they already knew and what they needed to know. They also used self-questions to help them to predict.

Notetaking

Every student in the study took notes in some form. That form was most frequently manifested in outlining and

summarizing. Seven of the students said they used outlining in some form; three of them stated that they wrote summaries. Students said that they took notes for basically two reasons: (1) The teacher asked them to do so. (2) The students expected to be tested on the material over which they took notes. In outlining, unless the teacher specified a formal outline with Roman numerals for major headings and letters for subheadings, the students usually made informal outlines in a kind of list that was structured around the main ideas of the text or the words in bold print on the page. In general, the ones who used outlining said that this activity was helpful because they could use their notes to review main ideas without rereading the material. This finding paralleled the literature discussed in Chapter II (Policastro, 1975; Hansell, 1978; Pfeiffer, 1984; Segal, 1988). It also appeared to be consistent with the data from the teacher questionnaire. Almost 79 per cent of the respondents to the homebound teacher questionnaire indicated that they used outlining in their instruction.

Students who summarized important sections stated that such an activity helped them understand the content better than simply reading it. Like the outlines, summaries were a handy review source for tests over the material. Ninety per cent of the homebound teachers responding to the survey indicated that they use summaries in their teaching at least sometimes. Again, students and teachers upheld what

the literature showed about a certain study skill, summaries in this case.

Questions

Students answered basically two kinds of questions: self-questions (mentioned above) and those devised by others, either by textbook writers or by their teachers. They used self-questions in an attempt to predict the kinds of questions classroom teachers would ask. The writer notes that students devised those self-questions on their own. In answering someone else's questions either from study guides or textbooks seven of the students said that they answered adjunct questions, questions at the end of the chapter, and work sheet or study guide questions, either devised by the teacher or gleaned from workbooks or other materials. It is noteworthy that 100 per cent of the respondents to the homebound teacher questionnaire (discussed below) indicated that at least sometimes they used questions at the end of the chapter. Eighty-five per cent of the respondents indicated that they used study guides at least sometimes.

Students said that they answered the questions primarily because they were asked to do so by their teachers and/or because knowing the answers to those questions helped them do well on a test over the material. Of those different kinds of questions, the students said that adjunct questions were the most effective in helping them comprehend

the text. The students' preference for adjunct questions related directly to the literature discussed in Chapter II above which shows adjunct questions to be more effective than questions at the end of the chapter in helping students understand the text.

Vocabulary

In addition to answering questions and taking notes, every student worked with the vocabulary of at least one subject. Very often science courses, like biology and chemistry, and foreign language courses involved the most vocabulary work. Taking notes in their vocabulary study consisted almost exclusively of writing the word and its definition. However, one student tried to use the new word in context and to apply it to her everyday life.

When they studied for vocabulary tests, students studied the word and its definition. Again, like the activities of answering questions and taking notes, students wrote definitions because teachers asked them to do so and because students expected to be tested on those words. Generally the test would consist of matching the word to its definition in some form. In their vocabulary study, the students did not use more effective techniques like a structured overview that have been mentioned in the literature.

While 80 per cent of the homebound teachers who

responded to the questionnaire (See the discussion below) indicated that they always or almost always used vocabulary study with their students, and over 84 per cent indicated that they used a structured overview, they did not indicate other methods used in that approach.

Other Skills

Two students in the study used split page note taking. One student used it because a teacher taught it to her, and the other student devised it on her own. A few students used some form of metacognitive questioning, asking themselves what they thought the passage would contain, what they needed to know about it, how they needed to approach it. One used that technique because a teacher had taught it; another devised it on her own to predict what the teacher would expect from her on assignments and tests. One student used a pre-reading/post-reading approach that was taught to her by her teacher. None of the students used semantic mapping or structured overviews. It appeared that few of the students' classroom teachers were aware of these techniques; if they were, they did not use them with these students. However, as shown in Table 7 below almost 58 per cent of the homebound teachers who were surveyed indicated that they used semantic mapping. Seventy per cent indicated that at least sometimes they use a technique that involves students checking their own progress.

Homebound Teacher Questionnaire

As was stated in Chapter Three previously, the writer sent a questionnaire to 25 homebound teachers in county school systems surrounding the system in which the students in the study were enrolled. The average enrollment for secondary students for the school year, 1989-90, in those counties was 2,037 (Directory of Tennessee Public Schools, 1990). The enrollment for secondary students in the East Tennessee county used for the study was 2879.

Rural Nature of Counties

The counties had sizable rural populations. All of the counties except the one in which the students were interviewed were defined as rural counties according to Lewis (1989).

> A Tennessee rural school system serves no municipality having a population greater than 10,000 and meets one of the following criteria:
>
> school district has a population density of less than 150 people per square mile
>
> or
>
> Sixty per cent or more of the school district's population live in communities of 5,000 [people] or fewer (p. 3)

Although the county school system in which the student interviewees were enrolled served a municipality of 19,650 people, 62% of the population in that county lived in communities of 5,000 people or less. Thus, while the

county's school system is not a rural one according to Lewis's definition, a majority of the population served by the school system lived in rural communities.

Each of the other seven county school systems in which homebound teachers were surveyed did meet Lewis's criteria for a rural school system. In four of those counties, 100 per cent of the population was rural. In three of those counties, 82.7 per cent, 86.6 per cent, and 88.5 per cent of the population was rural (Lewis, 1989).

The county in which the interviewees were enrolled had two high schools, grades nine through 12. All counties had two or more high schools that enrolled at least grades 9 through 12. One county had one comprehensive high school.

Questionnaire Results

The questionnaire was sent to 25 homebound teachers who taught homebound during the year 1989-90 in eight East Tennessee county school systems. Eighty per cent of the teachers returned the survey. The following discussion addresses the results of the responses from those homebound teachers.

Kinds of Study Skills Used

As seen in Appendix A, the first section of the questionnaire asked how often the homebound teachers used 13 different study skills. They were asked to check always,

almost always, sometimes, almost never, never. Table 7 below shows, in descending order, the percentages of teachers who indicated that they used a given study skill with their students either sometimes, almost always or always.

The reader will note that 100 per cent of the respondents stated that they use vocabulary study and questions at the end of the chapter. Familiarity with these two time-honored approaches may be the reason for this figure. The reader will also note that other study skills are used at least sometimes by the majority of the teachers, 57.9 to 90 per cent, but with less frequency. Fewer teachers indicated that they always used these procedures, and more indicated that the skills were sometimes used. Summaries and SQ3R were always or almost always used by 60 and 68.4 per cent respectively. Fifty per cent of the respondents indicated that they always or almost always used skimming or scanning. Fifty-five per cent indicated that they always or almost always allowed students to check their own progress.

A majority of the teachers (57.9 per cent) indicated that they used semantic mapping; however, this figure is considerably smaller than the next smaller figure of 70 per cent for both notetaking and for students checking their own progress. The reasons for the low use of semantic mapping could be numerous. Teachers may be unfamiliar with

Table 7

Per cent of homebound teachers in eight East Tennessee counties who said they used a given study skill

STUDY SKILL	ALWAYS	ALMOST ALWAYS	SOMETIMES	TOTAL
vocabulary	40.0	35.0	25.0	100.0
questions at end of chapter	35.0	45.0	20.0	100.0
summaries	25.0	35.0	30.0	90.0
graphic aids	10.0	25.0	50.0	85.0
study guides	15.0	25.0	45.0	85.0
structured overviews	5.3	31.6	47.4	84.2*
SQ3R	26.3	42.1	10.5	78.9*
outlining	0	16.7	61.1	77.8#
skimming or scanning	5.0	45.0	25.0	75.0
oral recitation	10.0	30.0	35.0	75.0
notetaking	5.0	30.0	35.0	70.0
students checking own progress	5.0	50.0	15.0	70.0
semantic mapping	0.0	21.1	36.8	57.9

* Only 19 of the 20 respondents answered this question. Thus, these per cents are based on n = 19, not on n = 20.
# Only 18 of the 20 respondents answered this question. Thus, these per cents are based on n = 18, not on n = 20.

the technique; they find it ineffective; or they may find that the time required to teach it could be better spent with other skills the students already know.

Source of Study Skills

The survey also asked homebound teachers to indicate where they found the study skills they used. Table 8 shows that ninety per cent of the respondents indicated that the skills originated from textbooks they use with their students or with other teaching materials.

As Table 8 shows, ninety per cent of the teachers indicated that the students' textbooks were a source for study skills. While no specific study skill was identified, the fact that 100 per cent of the respondents indicated the use of questions at the end of the chapter, it is justifiable to assume that those questions are primarily the type of study skill found in the students's textbooks.

Sixty-five per cent of the respondents indicated that the skills were the result of their own creation. One respondent stated that he or she learned the skills from another classroom teacher; another said that he/she learned the skills at an in-service meeting.

Only 25 percent of the teachers said that they learned the skills in a college course. The writer is somewhat surprised by this low figure for several reasons. First, either a course in content area reading or one that

Table 8

Homebound teachers' sources for study skills in eight East Tennessee counties

Source	Per cent of teachers who indicated a given source
textbooks	90%
teachers' creation	65%
college course	25%
colleague(s)	5%

The numbers total more than 100% because teachers indicated more than one source.

contains a review of the competencies addressed therein has been a Tennessee requirement for secondary certification or licensure since 1974 (Tennessee State Board of Education, 1986,p. 154). Second, the textbooks used for that course in at least four colleges during the years 1989 through 1990 (Ryan, unpublished syllabus; Alfred, unpublished syllabi, Keith, unpublished syllabus) in the state of Tennessee contain material on study skills. (See Santeusanio, Vacca and Vacca, and Roe, Stoodt, and Burns, for example.) Also, a survey of 59 professors in the United States showed that the subject of study skills ranked sixth in a list of 16 major topics that, according to the professors, should be addressed in a course on teaching reading in the content areas (Farrell and Cirrincione, 1986). One can only conjecture that the respondents to the questionnaire gained their certification before the requirement, took a content

reading course that did not address study skills, or simply forgot that they learned study skills in a college course. They may have been exposed to the study skills in the college course, but failed to see their relevance at the time.

Student Grade Levels

In addition to addressing study skills, the survey asked homebound teachers to indicate the grade levels of their students. As shown in Table 2 above, 50 per cent of the teachers indicated that some of their students had been high school seniors. Sixty per cent of respondents said that they had taught 11th graders on homebound. Forty-five per cent taught 10th grade students, and forty per cent had taught 9th graders.

Diagnoses

The survey also asked respondents to indicate the most frequent medical diagnosis or treatment causing a student to go on homebound. Those results are discussed and illustrated above. The survey shows that homebound students of these teachers suffer a variety of maladies.

Cooperation from Parents, Students, and Colleagues

Finally, in regard to the cooperation experienced with parents, students, and classroom teachers, the questionnaire

asked respondents to check very often, often, sometimes, not often, or never in answer to these questions.

As Table 9 shows, 95 per cent of the homebound teachers said that students and parents were either often or very often cooperative. When one includes the "sometimes" category for both students and parents, the figure rises to 100 per cent. In contrast, only 55 per cent of the respondents said that classroom teachers were often or very often cooperative. When one includes the "sometimes" category with "often" and "very often categories," the percentage jumps to 85 percent. Even so, this figure is below the one that indicates how often homebound teachers find students and parents cooperative. It is noteworthy that while none of the homebound teachers indicated that parents and students were not often or never cooperative, fifteen percent of those teachers indicated that the classroom teachers were not often cooperative in giving them assignments and materials.

One is left to ponder why parents and students outscored classroom teachers in the cooperative category. The data do not answer the question. It is possible that parents and students felt a greater stake in a successful homebound experience than classroom teachers did; and, thus, parents and students demonstrated more overt cooperative behaviors. On the other hand, busy classroom teachers each may not always place communication and cooperation with the

Table 9

Frequency of student, parent, and classroom teacher cooperation with homebound teachers in East Tennessee

Perception that homebound students were cooperative	Per cent of teachers who checked this category
Very often	45%
Often	50%
Sometimes	5%
Perception that parents of homebound students were cooperative	
Very Often	55%
Often	40%
Sometimes	5%
Perception that classroom teachers were cooperative	
Very often	25%
Often	30%
Sometimes	30%
Not often	15%

homebound teacher high on their list of priorities.

Teaching All Subjects

As Table 10 below shows, 95 per cent of the homebound teachers indicated that they were often or very often expected to teach all secondary subjects that the homebound student was taking. Yet only 50 per cent of them often or very often felt adequately prepared. Twenty-five percent of the teachers said they sometimes felt adequately prepared

Table 10

Per cent of homebound teachers in East Tennessee who were expected to teach all subjects taken by their students

Frequency	Per cent
Very often	80%
Often	15%
Sometimes	5%

to teach those subjects, and twenty five per cent said that not often or never did they feel adequately prepared. With a quarter of the homebound teachers feeling unprepared in some of their students' subjects, it is possible that they need more help from the classroom teachers in preparing to teach those subjects.

Finally, homebound teachers were asked to indicate whether they monitored their students' academic progress after the students returned to the regular classroom. As Table 11 shows below, 75 per cent of the respondents stated that they sometimes, often, or very often checked progress. Of those who monitored student progress, as shown above, almost 56 per cent stated that their students' grades often stayed the same or rose after returning to the classroom from homebound instruction. The figures are a noteworthy contrast to the finding in the Phoenix Union High School District report which indicates that the grades students receive on homebound were sometimes higher than

Table 11

Homebound teachers who monitored their students' progress after they went back to school

Frequency	Per cent
Very often	15%
Often	20%
Sometimes	40%
Not often	20%
Never	5%

their "average previous grades" (p.5).

As Table 12 shows, almost 17 per cent of the East Tennessee homebound teachers who answered the questions about status of students' grades indicated that those grades did not often go up. One respondent in this group wrote the following comment by his or her answer: "Frequently, students do better on homebound - - probably due to one-on-one instruction and greater time to prepare." One could also argue that it echoes the advantage of individualized instruction that parents and students found with homebound instruction.

Summary of Chapter IV

Student Interviews

The homebound students in the study stated that they faced a number of unique challenges that impacted directly on their attempt to complete assignments and to progress

Table 12

Per cent of homebound teachers who indicated that their students' grades either stayed the same or rose when they returned to school

Frequency	Per cent
Very often	5.6%
Often	50.0%
Sometimes	27.8%
Not often	16.7%

academically. Also, these students used study skills, especially if they were mandated by the teachers. Finally, the students were motivated to study by their desire to do well on tests and remain competitive with their classmates. It would be inappropriate to draw sweeping generalizations from this study of a small group of East Tennessee homebound students. However, it is conceivable that other homebound students in other parts of the country would answer the same set of questions in similar ways. The truth of that statement remains to be tested.

Homebound Teachers

On the questionnaire completed by the homebound teachers in the study, one finds a clear indication that those teachers used study skills with their students. The group of teachers from whom these answers were gleaned is small, and the writer draws no inferences for the broader

population of homebound teachers across the country. However, the information offered by the respondents in the present study contributes to the general knowledge about homebound instruction, at least as it is practiced in eight East Tennessee counties. Similar surveys done on a larger scale would provide an interesting comparison to the present study.

CHAPTER V

SUMMARY, CONCLUSIONS, RECOMMENDATIONS, AND NEED FOR FURTHER RESEARCH

Summary

By way of summary, the purpose of this study was to answer the following key questions: (1) How do homebound students describe their use of study skills while they are on homebound? (2) How often do homebound teachers say they teach certain study skills to homebound students?

The method used to answer those questions consisted of two parts. The first part involved interviews of ten selected secondary students who had been or were enrolled in homebound instruction in an East Tennessee county school system during the school year, 1989-90. Their parents were also interviewed. The interview questions centered around three basic factors in the students' homebound experience: school factors, situational factors, and study skills factors. Interviewees were also given the opportunity to discuss other factors that were of concern to them relevant to their homebound experience.

The second part of the study involved a questionnaire sent to 25 homebound teachers in the county in which the students were enrolled and in seven surrounding counties. Those questions centered around the kinds of study skills the homebound teachers used with their homebound students during the 1989-90 school year.

The need for the study was made clear by the fact that the literature on study skills used by homebound students is nonexistent. Thus, in regard to the study skills used by, or taught to, homebound students, who are often home alone, without the benefit of direct instruction, one finds a gap in the knowledge of scholars in this field of instruction. The present study, therefore, provides at least some answers from a limited group of students and teachers, and, thus, contributes to the body of literature in instruction.

The writer conducted the study with four basic assumptions: (1) Homebound students are important. (2) Interviewees would tell the truth. (3) Homebound teachers would provide accurate information on the questionnaire. (4) Descriptive studies confined to a relatively small group have value. The writer found no reason to alter those assumptions.

Conclusions and Recommendations

An analysis of this study leads to a number of conclusions and recommendations. Those conclusions and recommendations are divided into two sections, one of which relates to the student interviews, the second of which relates to the teacher questionnaire.

Conclusions and Recommendations from the Interviews

(1) Regarding the question of what study skills students say they used, it is evident that the students used

a variety of study skills, many of which they devised for themselves, others of which they learned from their teachers. The study skills most often discussed by students were (1) previewing; (2) predicting; (3) answering adjunct, chapter, teacher-made, and self-questions; (4) notetaking which consisted primarily of summarizing, paraphrasing and outlining; (5) vocabulary study. It is obvious that the students used the study skills because they found them effective ways to accomplish their purposes of understanding the material, doing well on tests, and ultimately finishing high school.

From these data, one can conclude that students - - at least the ones in this study - - will apply study skills that are taught to them, especially if they expect to be tested over the material they are asked to study. Such a conclusion belies the research indicating that students are not taught and do not use study skills. It also supports the assertions of Good and Brophy (1987), who showed that teacher expectations have an effect on student performance.

As a result, the writer recommends that teachers continue to hold students accountable for their work and to use study skills with students as effective methods of instruction.

(2) The writer concludes that students in the study enrolled in homebound instruction because an impairment, a disability or a discipline problem prevented their attending regular classes and because they wanted to remain current

with their assignments so that they could accomplish their goal of earning passing grades in their courses and earning a diploma.

The recommendation that grows naturally out of this conclusion is that school officials should continue to make homebound instruction a meaningful option to students who want it and qualify for it. The writer also recommends that school officials keep data on the kinds of diagnoses that recur most often among their students so that teachers can familiarize themselves with how those afflictions affect students' ability to complete their work effectively.

(3) Almost half of the students in this study spent from eleven to thirty days on homebound. With this kind of data the writer concludes that teachers of the students in this study would have done well to plan lessons for a two to four week duration. As a result of this conclusion, the writer recommends that homebound teachers use past data about the length of time students generally stay on homebound so that they can use this information for planning how best to meet the instructional needs of their students.

(4) Along with concerns about academic success, parents and students expressed concerns about positive teacher-student relationships and about a school environment that makes academic success possible with a minimum amount of pressure and distractions.

Recommendations relevant to this conclusion are simple. School officials should make certain that their homebound

programs are staffed by teachers who are able to relate with homebound students in a positive way and who can help students remain current with their regular classroom assignments.

In light of rather surprising finding about distractions and pressure, the writer recommends that school officials examine the extent to which students experience such distractions and pressure. If these problems do exist to any great degree in the school environment, school officials should identify their cause, determine whether they have a negative impact not only on student performance but also on student affect, and develop school environments that minimize distractions and pressure.

Conclusions and Recommendations from the Homebound Teacher Questionnaire

(1) A majority of teachers who responded to the questionnaire indicated that they used each of the study skills found on the questionnaire at least some of the time. From this finding one can conclude that, like homebound students, the teachers in this study are contradicting the literature that indicates teachers do not use study skills. Given the finding above that students will use study skills if their teachers ask them to do so, the writer recommends that homebound teachers continue the use of study skills as a way of helping students learn from their textbooks.

(2) The majority of the teachers in the study found

information on study skills from students' textbooks or other instructional material, not from college courses. Such an indication leads to the conclusion that, although courses required for licensure or certification should contain information on study skills, these homebound teachers either (a) did not take those courses; (b) took the courses but either did not learn about study skills in them or did not see the relevance of study skills at the time they were studying them; (c) forgot that they learned study skills in those courses; or (d) found the study skills provided by student texts and other instructional material to be more effective than those they learned about elsewhere.

In light of these possibilities, the writer recommends that publishers of student textbooks and instructional materials continue to include study skills in those materials. The writer also recommends that instructors of college courses in reading in the content areas emphasize the study skills in a way that shows how they relate directly to effective instruction. Also, school officials should conduct in-service workshops in the use of study skills for all secondary teachers in the school system.

(3) Homebound teachers in the study indicated that parents, students, and classroom teachers were cooperative. However, parents and students appeared to have cooperated with the homebound teacher to a greater degree than classroom teachers did. Certainly, to the extent that

classroom teachers are not cooperative with homebound teachers, the writer recommends that officials develop a greater interface between homebound teachers and classroom teachers. Open lines of communication can do a great deal to encourage cooperation.

(4) Only half of the homebound teachers who responded to the questionnaire often or very often felt adequately prepared to teach all subjects. In the face of these data, one can conclude that these homebound teachers were being asked to teach subjects that fall outside their areas of certification and were feeling uneasy about doing so. As a result, the writer recommends that the homebound program contract with regular classroom teachers who are certified in the subjects that homebound students are taking, thereby giving students a greater opportunity to learn those subjects from teachers who are adequately prepared to teach them effectively. These teachers could teach homebound students after school, or could divide their time in the school day between teaching in the regular classroom and teaching homebound students.

(5) The homebound teachers who responded to the questionnaire indicated that their students' grades either rose or stayed the same when the students returned to school. Such an indication leads one to conclude that homebound teachers are succeeding in helping students remain current with their regular school work. On the other hand, one could conclude that, given their desire for academic

success, students are resourceful enough to do well whether or not the homebound teacher was effective. Thirdly, one could say that the regular class went so slowly that the re-entering student had ample time to catch up with the rest of the class. Finally, one could conclude that the regular classroom teachers were taking the time to help students catch up.

Since the data in the study are not sufficient for one to choose decisively from these conclusions, the writer recommends that school officials take a closer look at the overall performance of homebound students to determine whether the homebound program is in reality the deciding factor that causes students to do well when they return to school. If it is determined that homebound instruction is the deciding factor, then homebound instruction is justified. If it is determined that the homebound program is not the deciding factor, such a conclusion would have serious implications for the further existence of homebound instruction, the discussion of which is clearly beyond the confines of this study.

Need for Further Research

In the light of the conclusions and recommendations discussed above, scholars may want to address the following questions.

(1) What kinds of study skills would be used by homebound students in other places and how would they

compare with the ones used by the homebound students in this study?

(2) Are other homebound students and their parents motivated by the purposes of academic success and high school graduation?

(3) What are the most frequent diagnoses found among homebound students in general? Will one see a pattern as it relates to the geographic location, seasons of the year, and the socio-economic status of students?

(2) How many days can a homebound teacher expect a student to stay on homebound? Will this figure vary with geographic location, diagnosis, socio-economic status, and individual predilection to heal quickly or slowly?

(3) What effect does a negative relationship with a homebound teacher have on a homebound student's academic progress?

(4) If homebound students are accurate in their perceptions of distractions in the regular school atmosphere, what is the nature of those distractions? What effect do they have on students' study time and performance? Where do they originate; and how can they be eliminated?

(5) What kinds of pressure have homebound students felt in school? Is it a positive pressure to do their best and succeed, and are their complaints, thus, the typical complaints of students who are not really being pressured unduly? Was the perception of this pressure the result of fatigue that they were feeling before their illness was

diagnosed? Thus, was it directly related to their illness? Is there real, negative pressure that causes the kind of distress that interferes with academic performance? If so, where does it originate and how can schools in general and teachers in particular reduce such distress?

(6) How does the student performance of returning non-homebound students compare with the performance of returning homebound students to the classroom after several days' absence?

(7) How does the performance of homebound students who use study skills compare with the performance of homebound students who do not use them?

(8) What kinds of study skills do homebound students and homebound teachers in other school systems use, and how do those skills impact on homebound students' performance both at home and in the regular classroom.

(9) What kinds of study skills do homebound teachers in other locations use with their students and how do they compare with the skills identified in this study?

(10) To what extent do college instructors of Reading in the Content Areas emphasize the teaching of study skills with their perspective teachers?

(11) How do all of these questions relate specifically to the instruction of study skills on homebound?

The answers to such questions could make a significant contribution to the literature on study skills and on homebound instruction.

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APPENDIXES

APPENDIX A

QUESTIONNAIRE

HOMEBOUND TEACHERS

Please answer the following questions only if you taught secondary homebound students during the 1989 - 1990 school year. Base your answers on your estimates for that year.

I. Listed below are study skills that can assist student learning. With the scale below, indicate how often you used these skills with your secondary homebound students. Circle the number that best shows how often you used a given skill.
1 always; 2 almost always; 3 sometimes; 4 almost; 5 never

Study skill	Frequency of use				
A. outlining	1	2	3	4	5
B. notetaking	1	2	3	4	5
C. Sq3r (survey, question, read, recite, review) or a similar study skills method	1	2	3	4	5
D. answering questions within or at the end of a chapter	1	2	3	4	5
E. study guides	1	2	3	4	5
F. structured overviews	1	2	3	4	5
G. summary	1	2	3	4	5
H. the student checks his/her own progress	1	2	3	4	5
I. skimming or scanning	1	2	3	4	5
J. graphic aids	1	2	3	4	5
K. oral recitation	1	2	3	4	5
L. vocabulary study	1	2	3	4	5
M. semantic mapping	1	2	3	4	5
O. other (please specify) _____	1	2	3	4	5

The skills you used above:

1. came from the students' textbooks or other teaching materials _____
2. were your own creation _____
3. were learned by you in a college course _____
4. originated elsewhere (Please explain.) _____

II. Miscellaneous information

A. How many years have you taught homebound?_____

B. To the best of your knowledge, what percent of your students were classified as:

K - 6th _____	7th grade_____
8th grade _____	9th grade_____
10th grade _____	11th grade_____
12th grade _____	other (please specify _____

C. What is the fewest number of students that you had on your homebound roll in any given week during 1989 - 90? _____ the largest number?_____

D. In 1989 - 90 were you a full-time homebound teacher?
_____yes _____no

III. Using your best estimate, please rank, according to their frequency, the following diagnoses that caused your students to be placed on homebound in 1989 - 90 year. Place a number 1 by the most frequent diagnosis, a 2 by the next most frequent diagnosis, etc.

Diagnosis	rank according to frequency
A. mononeucleosis	_____
B. broken limbs (i. e. leg, toe, foot, arm, wrist, hand, finger, ankle)	_____
C. broken pelvis or back	_____
D. surgery	_____
E. pregnancy	_____
F. aids	_____
G. depression or other emotional problems	_____
H. other (please specify.)	_____

IV. Please circle the appropriate number after each question below.

In the school year 1989 - 90, as a homebound teacher, how often did you experience the following:

A. You were expected to teach all secondary subjects that the homebound student was taking in his/her regular secondary schedule.

1. very often 2. often 3. sometimes 4. not often 5. never

B. You felt adequately prepared to teach all the subjects that your students were taking in the regular school program

1. very often 2. often 3. sometimes 4. not often 5. never

C. Homebound students were cooperative.

1. very often 2. often 3. sometimes 4. not often 5. never

D. Classroom teachers of the homebound student were cooperative in giving you assignments and materials.

1. very often 2. often 3. sometimes 4. not often 5. never

E. Parents of homebound students were cooperative

1. very often 2. often 3. sometimes 4. not often 5. never

F. You monitored your homebound students' academic progress after they returned to the regular classroom.

1. very often 2. often 3. sometimes 4. not often 5. never.

G. <u>If you circled numbers 1, 2, 3, or 4 in f above</u>, how often did you find that the homebound students' grades either stayed the same or rose while they were on homebound?

1. very often 2. often 3. sometimes 4. not often 5. never

In the enclosed envelope, please send your answers to :

Suellen Alfred
Tennessee Technological University Box 5042
Cookeville, Tennessee 38505

APPENDIX B

GUIDELINES FOR STUDENT INTERVIEW

The student interview will be guided by the following questions but will not be limited to them. The interview will be open-ended. The writer will ask not only the following questions but other questions as they arise from the comments made by the student.

I. School
   A. What methods do you wish your teacher had or had not used to help you study your assignments while you were on homebound?
   B. How did homebound compare with regular school?
   C. How difficult was it to adjust to going back to school after you left homebound?

II. Situational factors
   A. What bothered you most about being on homebound?
   B. What were the advantages of being on homebound?
   C. What role did your friends play in helping you complete you assignments?
   D. 1. How did your illness interfere with your attempts to complete your assignments?
      2. How did you compensate?

   E. What other problems did you face at home that you did not have at school?
      1. t. v. addiction
      2. siblings
      3. lack of someone around to motivate you
      4. other distractions

   F. Was a parent or other adult at home with you most of the time or were you left home alone most of the time?

   G. What family members became involved in helping you complete you assignments and what roles did they play?

   H. What routine did you and your family follow to see that your got the work done?

   I. How did being on homebound affect your self-discipline?

III. Study skills factors
   A. How did you schedule your day to do your assignments?
   B. What resources besides textbooks did you use at home

to complete your assignments?

1. newspapers
2. VCR
3. television
4. radio
5. tape player
6. encyclopedia
7. radio
8. computer
9. telephone
10. atlas
11. other

C. Regarding the previous question, did you use these resources because a teacher required you to or because you thought to use them on your own?

D. What kinds of reading and writing study skills helped you the most in completing your work?
   1. Pre-reading skills like
      a. doing an overview of the chapter
      b. setting goals - i. e. What do I need to know?
      c. predicting what will be in the chapter
   2. Interaction with the text like:
      a. outlining
      b. paraphrasing
      c. summarizing
      d. taking notes
      e. asking questions about the text
      f. underlining or highlighting
   3. Extension activities like:
      a. giving yourself a test
      b. applying what you learned from the text in a practical way
   4. Other activities
      a. answering questions at the end of the chapter
      b. simply reading the material without taking notes
      c. knowing the teacher would give you a test
      d. writing a personal essay on the content

5. Did you use any of the above study skills because you figured out how to do them yourself or because a teacher suggested them? Be specific.

APPENDIX C

DEFINITIONS OF STUDY SKILLS

The following definitions are taken from Roe, Stoodt and Burns (1987), unless otherwise noted.

graphic aids - "Maps, graphs, tables, charts, diagrams and pictures. . ." (p. 162)

notetaking - "Taking notes on material read for classes. . ." (p. 162)

outlining - ". . .recording information from reading material in a way that makes clear the relationship between the main ideas and supporting details" (p. 139)

paraphrasing - ". . .restating information in an equivalent statement" (p. 104)

REAP - read, encode, annotate, ponder (p. 137)

scanning - Running the eye rapidly down the page, concentrating on particular information being sought (p. 184)

skimming - ". . .reading to get a general idea or overview of the material. . ." (p. 184)

summarizing - restating "what the author says in a more concise form" (p. p. 143)

SQ3R - survey, question, read, recite, review. (p. 135)

APPENDIX D

STUDENT PROFILES

Code: ST# = Student number;
M/F = Male or female
BD = birthday;
GR = Grade classification
1P/2P = In a one parent, 1P, or two parent, 2P, home
SCH = School: E = high school on the eastern side
W = high school on the western side
GPA = Grade point average through 89-90 school year

DIAG = Diagnosis (reason for going on homebound)
1 = mononeucleosis
2 = broken pelvis
3 = gall bladder surgery
4 = depression
5 = quadriplegic
6 = herpes zoster
7 = broken hip
8 = disciplinary action
9 = broken ankle

ST#	SCH	M/F	BD	GR	GPA	1P/2P	DIAG	DAYS ON HB
1.	E	f	2/12/75	9	3.00	2	1	27
2.	E	f	11/12/71	12	1.89	2	1	21
3.	W	f	9/01/72	10	3.00	1	6	9
4.	W	f	4/03/73	11	2.33	1	2	17
5.	W	f	4/17/74	10	2.42	2	3	31
6.	E	f	7/06/74	11	1.73	1	4	96
7.	E	m	11/24/70	12	1.32	1	5	48
8.	W	m	12/05/71	12	1.92	1	7	99
9.	W	m	4/11/71	12	1.90	1+	8, 9	120
10.	W	m	5/12/74	10	2.33	2	1	21

+Parents were not divorced, but the father worked in another state and came home infrequently. Thus, he was rarely in the home.

VITA

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