IDENTIFICATION OF THE READING COMPREHENSION NEEDS OF THE FRESHMAN STUDENTS AT THE UNIVERSITY OF GAZIANTEP

A Master's Thesis

Presented by

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Approval of the Graduate School of Social Sciencea

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I certify that this thesis satisfies all the requirements as a thesis for the degree of Master of Arts.

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We certify that we have read this thesis and that in our opinion it is fully adequate, in scope and quality, as a thesis for the degree of Master of Arts in English Language Teaching.

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ABSTRACT

IDENTIFICATION OF THE READING COMPREHENSION NEEDS OF THE FRESHMAN STUDENTS AT THE UNIVERSITY OF GAZIANTEP

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M.A. in English Language Teaching

Supervisor: Assoc. Prof. Dr. Tokay GEDIKOGLU

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This study is mainly concentrated on determining the reading comprehension needs of the Freshman students at the Faculty of Engineering of the University of Gaziantep.

In this descriptive study, analysis of the needs constitutes the main body of the whole investigation because the assessment of the Freshman students' strategy use, their degree of success, lacks and expectations, in terms of reading comprehension, has always been a prerequisite in reaching a thorough understanding of their needs. Therefore, a descriptive study was carried out by administering questionnaires to the subjects involved in

the EFL teaching/learning processes at the University. To serve the purpose of identifying Freshman students' reading comprehension needs at the University of Gaziantep, the obtained data were classified and analyzed then percentile ranking procedure and chi square formulae were applied as described in chapter III. In addition, reading models, the psycholinguistic perspective and strategy use in reading were also presented to gain insights in the recent developments and remarkable ideas as well.

On the other hand, among the aims of this study lies the the presentation of the far-reaching historical background of the reading research and the argument that reading is not a passive skill; on the contrary an active skill involving a great deal of complex processing and analysis. It is also hoped that this study would set a ground to initiate mutually benefical colloboration and dialogue between the Freshman Section and the Engineering departments. Furthermore the study may also contribute to the efforts of curriculum developers and materials writers who are engaged in Freshman English 101-102 courses.

The findings of the study have demonstrated that the hypotheses, formulated at the very beginning, were worthile testing since all of them played an important role in the process of suggesting solutions to the Freshman students' reading comprehension problems at the University of Gaziantep.

SCIENCE CODE: ELT 599

OZ

GAZIANTEP UNIVERSITESI MUHENDISLIK FAKULTESI BIRINCI SINIF (Freshman) OGRENCILERININ OKUMA-ANLAMA BECERILERINE ILISKIN IHTIYACLARININ ANALIZI

SUMMAK M. Semih

Yuksek Lisans Tezi, Ingiliz Dili Egitimi

Tez Yoneticisi: Doc.Dr.Tokay GEDIKOGLU

Haziran, 1992, 192 Sayfa

Soz konusu tez, Gaziantep Universitesi Muhendislik Fakultesi birinci sinif ogrencilerinin okuma-anlama becerileri konusundaki ihtiyaclarini belirlemeye yoneliktir. Ilk bolum, problem, amac, evren, orneklem, sayiltilar, sinirlilik ve denencelerden olusmaktadir. Ikinci bolum arastirma konusuna iliskin edebiyat taramasini icermektedirler. Ucuncu bolumde, veri toplama yontemleri ve bilgi analizinde kullanilan metodlar aciklanmaktadir. Dorduncu bolum, anketler araciligi ile elde edilen sonuclarin analizerini icermektedir. Besinci ve son bolum ise, sonuclarin tartisilmasi ve sonuclarla tavsiyelerden olusmaktadir.

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CHAPTER I

INTRODUCTION

1.0 Presentation

This chapter contains background information related to the variables underlying the study the problem and the purpose of the study. In addition, assumptions concerning the students' real needs in terms of reading comprehension skill, and their lacks are expressed. In the scope of the study limitations are described. Hypotheses and the definition of terms are also stated in the same chapter.

1.1 Background Information

A foreign language teaching program requires an assessment of skill-requirements on the part of the students, especially for those who are responsible for service and developmental courses at the universities where English is taught as a foreign language and is the medium of instruction. A language course to be successful and effective, should include only what is relevant to the needs of the learner, if so, it will be more motivating

and beneficial because it is learner-centered. Therefore the core of this study is devoted to the identification of reading comprehension needs of freshman students in relation to their general language requirements at the University of Gaziantep, Faculty of Engineering. On the other hand, this study aims at leading a discussion for the appreciation of the complexity of reading process, in many respects. Therefore, the history of reading comprehension was traced back to the beginning of the century and updated by a wide spread survey of the current research findings to present a complete picture of the reading comprehension instruction and research.

The students who are admitted to the Faculty of Engineering of the University of Gaziantep may take an exemption examination and according to the level of their proficiency they either start the English Preparatory School or are required to take the courses of the first year, as freshman students. At the University of Gaziantep only Faculty of Engineering is English medium; therefore the freshman students are required to take freshman English courses(English 101 for the first term, and English 102 for the second term)for one academic year at the Department of Foreign Languages. The general aim of the course is to raise the proficiency of the students to such a level that they will be able to follow their major courses in their own specialisms with ease throughout their university education and also to follow the new developments in their area of interest in the future. In

English Preparatory School, during the course that lasts almost eight months the students are exposed to six hours of English a day including an hour of language laboratory work. The course is mainly concerned with general English, besides students are given a wide spectrum of grammatical structures and vocabulary items without much emphasis on reading skill, furthermore students are completely devoid of training in the areas of note-taking, summarizing, skimming, and scanning. After a one year study at the English Preparatory School, the students are evaluated on the basis of their language proficiency and the successful ones can take the first year English courses (i.e freshman English courses). The students who start the first year program are expected to use English for academic purposes since the instruction is in English. In other words, they have to fulfill the academic requirements in English by performing various activities, such as reading text books, preparing term papers and technical lab.reports, taking notes, summarizing, listening lectures, and writing answers to examination questions.

1.2 Problem

The fundamental goal of the Freshman English is, as stated in the catalogue of the University of Gaziantep ,to consolidate the students' working knowledge of the English language through the reinforcement of the listening comprehension skill, reading comprehension

skill, and the writing skill, with the emphasis on technical English. Thus, reading comprehension is considered one of the most important language skills especially for academic purposes. At freshman level, what learners really need is a more concise program in which reading comprehension skill is stressed, since it is the only opening to the language acquisition and input where English is taught as a foreign language for four hours a week. This need can be satisfied only through a systematic analysis of students requirements in terms of reading comprehension skill and the language program can be based on the objectives developed on the basis of this analysis.

The problem, then, appears to be the identification of the Freshman students' real needs, in terms of reading comprehension skill , by conducting a research study in which the opinions of all the related subjects would be asked for.

1.3 Purpose of the Study

The aim of this study is to investigate the freshman students' reading comprehesion needs at the Faculty of Engineering of the University of Gaziantep, Therefore, assessment of the strategies employed by the freshman students and their degree of success and lacks, in terms of reading comprehension needs, constitute the body of this study ,since such an analysis was a prerequisite to reach sound understanding of their needs.

Having realized the importance of reading comprehension skill for freshman students, it is hoped that it would be possible to come up with concrete results which might help in the solution of the above-mentioned problems.

1.4.Hypotheses

Below are the hypotheses on which the study is based.And these hypotheses will be tested throughout the investigation to provide answers to the problem of the study.

1. A majority of freshman students, do not consider reading comprehension skill to be important and necessary when reading their text books, other printed materials, and exam questions as well.

2. By far the largest proportion of freshman students can not locate the topic sentence, general message, specific information when reading for comprehension.

3. Freshman students' ability in comprehending a technical or scientific text is not at a level where they they can narrate/retell the same text in their own words.

4. Freshman students are not capable of, properly carriying out several reading comprehension procedures

such as distinguishing facts from opinions, taking notes and guessing meaning from context.

5. To a great extent, freshman students are not successful in analyzing texts at paragraph, sentence and word level.

6. Most of the freshman students fail to identify the reference words and what they refer back to in a written text.

7. A large number of the Freshman students do not seem to have understood the functions of sentence and/or paragraph connectors.

8. Most of the Freshman students are not able to phraphrase what they read and organize the material in a written form of their own.

9. The majority of the students fail to deduce conlusions from a reading passage.

10. At tertiary level, only a minority of the freshman students underestimate the value of reading comprehension skill, compared with other language skills.

11. The students are not capable of detecting major and minor supporting sentences when analyzing a paragraph organization.

12. The students are not required to read critically.

13. The students do not consider reading speed to be an effective factor in their general success.

14. The majority of the students are not satisfied with the weekly teaching hours of English 101-102 courses,

because they are not exposed to sufficient reading practice.

15. To a great extent, the students believe that the reading comprehension skill gained in preparatory school and freshman English 101-102, will be helpful in other subjects also.

16. The reading comprehension passages in the English 101/102 text books do not appeal to the students' interest.

17. To a great extent the students do not consider the methods and the techniques employed in reading sessions to be effective .

18. A great majority of the Freshman students think Freshman English programme is devoid of supplementary materials which will contribute to their reading comprehension skill.

19. A large proportion of the students find the reading comprehension passages in the English 101/102 text books, irrelevant to their major and far beyond their proficiency level.

20. By far the largest proportion of the students, find the English 101-102 text books inconsistent with each other,with respect to their reading comprehension components.

21. The majority of the students think that an elective reading course offered in upper classes will of great help.

22. Instructors agree in considering reading to be

the most important language skill for the students.

23. Different instructor groups consider lack of a different reading comprehension strategy to be the reason for the students' failure in this skill.

24. Both of the instructor groups agree that their students have difficulty in understanding examination questions.

25. The instructor groups disagree in the ranking of different possible causes, leading failure on the part of students, in reading comprehension.

26. Both of the instructor groups demonstrate a strong agreement concerning the insufficiency of teaching hours for the Freshman English programs.

27. The instructor groups involved in the study, agree that an elective reading comprehension course is necessary in upper classes.

28. Neither of the instructor groups seems to have any idea about the text books and materials covered in classes other than those they currently teach.

29. The need for a coordination committee between the departments, is voiced by both of the instructor groups.

1.5 Scope of the Study

This study is limited to the opinions of 360 freshman students(total number,taking English 101 and 102 courses.)in five different engineering groups,such as

Electrical Engineering, Engineering of Physics, Civil Engineering, Food Engineering, Mechanical Engineering .In addition the opinions of 16 subject specialists and nine Freshman English Course instructors, whose experiences range between 10 and 15 years, were also referred to.

1.6 Assumptions

In this research it is assumed that:

1. The tools which are used in determining the reading comprehension skill needs of the freshman students at the Faculty of Engineering are valid and reliable.

2. Answers given by the subjects in the questionnaires are sincere.

3. Samplings represent the population.

1.7 Definition of Terms

Skimming : reading for the general idea.

Scanning : reading for the specific information.

Schema : readers existing concepts about the world, "knowledge already stored in memory".

Formal schema : knowledge about the structure or rhetorical organization, or knowledge of how texts are organized.

Content schema : background knowledge.

Rauding : A theory which links reading and listening

CHAPTER II

REVIEW OF THE LITERATURE

2.0 Presentation

This chapter is intended to portray the nature of reading comprehension instruction in America through a study of published research reports from 1910 through 1987. It is hoped by the researcher that this survey; both from primary and secondary sources, provides some insights into why we, still, seem to have gathered so little knowledge about reading comprehension. The lack of knowledge may be linked to unclear, but persistent notions about instruction in general and instructions in reading in particular. In the same chapter part 2.3, reflects the review of all the studies focused on reading comprehension within our reach, and within the same section we attempted to look at future directions for both the practitioner and the researcher.

2.1 Reading Comprehension Instruction in America Between 1910-1987.

Before 1884 there were no research reports published in English related to reading. The first piece of research focused reading was carried out by Romanes (1884) and presented in his book MENTAL EVOLUTION in ANIMALS. Although this researcher did not direct his attention to reading comprehension instruction he simply pioneered in research studies and assumptions to be tested by a number of subsequent investigators. Thorndike's handwriting scale published in 1910 was considred to be the beginning of scientific movement in education. With the advent of World War I, everybody realized that soldiers could not read and understand printed messages necessary for their survival and military life (Smith,1986). In 1917,Gray emphasized the importance of silent reading as a powerful means of improving reading comprehension (Gray,1917:17-32). He made several suggestions based on the existing research studies that are of great value not only during his time but even today. As Robinson (1990a:80-81) stated in their recent publication " Reading Comprehension Instruction 1783-1987" a student's background knowledge is a facilitator in comprehension process and emphasis on elements such as topic sentences ,phrases, relational words, types of modifying phrases are another important aspect in improving the quality of comprehension. Gray also proposed

that putting pressure on students to accelerate the rate of reading, usually results in defective comprehension, he also believed that fast readers are better comprehenders than slow readers.

Between the period 1910-1950 studies were conducted just because students had obtained poor scores on standardized reading tests and World War II, once made the authorities aware of the need to review reading comprehension instruction at all levels. Mc Cullough(1957) observed, after surveying 119 articles, and stated that;

> Throughout many of the studies consulted there runs the thread that we get what we work for consciously; that if both students and teacher are aware of the specific goals, those specific goals are more apt to be reached. Along with this finding however, runs the danger that narrowly concieved goals produce limited results. We must work for specific goals consciously, but those specific goals need to encompass a broad definition of reading skills if the product is to be dwarfed and distorted (p.475).

During the same year (1957) as Mc Cullough's review and comments, Soviet Union launched Sputnik, and this breakthrough brought the question of upgrading the traditional curricula in education as a whole, for the

first time, funds were assigned to reading instruction and reading reasearch. To undrestand reading comprehension instruction profoundly, it is necessary to review the 9 categories of methods based on the survey of a wide variety of individual studies, related to reading comprehension instruction from 1918 through 1987. Such a study has been conducted by Robinson and his colleagues Faraone, Hittlemann, and Unruh in 1990. According to Robinson et al.(1990:66) , these methods can be ordered as follows:

1. Exercises and drills
2. Teacher-Directed skill lessons
3. Rereading
4. Reading practice
5. Study skills
6. Word study
7. Oral presentations
8. Schema activation
9. Text structure

A number of researchers in the 1920s and 1930s found " summarizing" valuable in developing reading comprehension (Germane,1921; Newlun, 1920; Salisbury, 1934; Springsteed, 1925;). Germane, after several experiments, realized that listing important points after reading was useful only when accompanied by questions raised prior to reading. Similarly, in the 1980s Rinehart, Stahl (1983), Bean and Steenwyk (1984) conclude that

summarization can be of great value in improving reading comprehension.

Some other investigators appreciated student-generated questions and concluded that when students generated their own questions related to text and composed headings for sections of the text their comprehension level of the text improved (Davey, and Mc Bride, 1986; Dee-Lucas and Di Vesta, 1980; Doctorow, Witrock, and Marks, 1978; Prosser, 1979;Ritchie, 1985).

Although schema theory as a formal concept was unknown until recent years, the majority of the investigators who have conducted research on reading comprehension improvement, concentrated on schema activation.Schema theory can be defined as the role of background information (i.e., previously acquired and stored knowledge of the readers)in language comprehension (Carrell and Eisterhold, 1983). This previously acquired knowledge is called the reader's background knowledge, and the previously acquired knowledge structures are called schemata (Bartlett 1932, Adams and Collins 1979, Rumelhart 1980). According to schema theory, comprehending a text is an interactive process between the reader's background knowledge and the text, and for the efficient comprehension to take place a reader should relate the textual material to his own knowledge.The origins of schema theory can be traced back to 1853 when the so called "The Thought-Getting Model of Reading" was first introduced. In this model we can see the term "life

experiences" included in the model. This can be considered to be the counterpart of background knowledge.

Germane, in 1921, tried an interesting technique to improve comprehension level. In this technique two paragraphs of a general nature about the topic were introduced and studied by the readers. But it did not prove to be useful. Germane realized that questions raised prior to reading yielded better results. In 1927,Gatto combined prequestions and shorter selections related to the topic proved to be very successful. Ausbel (1960) employed another successful technique by introducing a shorter selection prior to studying a longer; and he called the technique an advanced organizer. This technique seemed to be very successful with older students. Another technique frequently employed is'semantic mapping' prior to reading (Sinatra, Stahl,Gemake,and Berg,1984; Tilemma,1983). This technique seems to work best with poor readers and poorly organized materials. Schema activation techniques that usually yielded better results were simulation games to teach superordinate ideas (Cohen and Bradly,1977), embedded study aid (Manzo,1979;Meeks,1979). Embedded aids mainly consisted of illustrations or headings inserted at some point in text. In a successful comprehension the reader's schema will interact with the text structure as indicated in several recent studies. In the 1970s and 1980s, researchers often manipulated text to determine how the text structure affected reading comprehension. Investigators found that training in some

type of syntactically organized text did not give any evidence of facilitating reading comprehension (Mavrogenes and Padak,1982; Solits and Pflaum, 1979). Yet some other distinguished researchers found that employing narrative text structure appears to benefit reading comprehension for many types and levels of learners (Carrell,1985; Slater,1985; Taylor and Beach,1984). Geva (1983) conducted an interesting investigation with Community College students, combining prior knowledge-the readers' schemata with the authors text structure through flowcharting and and this study proved to be very successful on the part of less skilled readers.

Monitoring or self-monitoring is an approach to improve reading comprehension. With this approach readers are conscious of what they know and what to use about language structure and content as they interact with text.Julia To-Dutka (1991) describes this procedure and states that " the purpose is to equip students with a procedure to clarify relationship among ideas found in written discourse.This analytic tool is particularly useful when students experience difficulty in grasping the main point what they are reading." (p.200) .Until the late 1970s little attention was paid to promoting metacognitive activity or self-monitoring as a technique for insreasing reading comprehension. Baker and Brown (1984) described three main features in metacognitive training; (1) training and practice in the use of task specific strategies (skills training),(2) instruction in the

orchestration of, and monitoring of these skills (self regulation training), and (3) information concerning the significance and outcome of these activities and their range of utulity. (p.381)

2.2 Overview of Research Studies Between 1910-1987

During the literature survey of this study we had the opportunity to discover a number of diverse but effective models for developing overall procedures for improving reading comprehension that should be considered by classroom teachers and investigators as well. This overview will be presented under the subtitles each of which represents a different category of research interrelated studies as; (1) Exercises and drills, (2) Teacher directed skill lessons, (3) Rereading, (4) Reading practice, (5) Study skills instrument, (6) Word study, (7) Oral presentations, (8) Schema activation, (9) Text structure.

2.2.1 Exercises and Drills

In 1921, Hoover carried out an experimental study providing drillwork for 568 third graders over a three month period. A nondrill group of 571 continued the "traditional program". On the Monroe Silent Reading Tests the drill group increased median scores from 4.0 to 9.0;the nondrill group increased from 3.9 to 7.0 (p.77-89)

Similarly another experimental study was conducted by Alderman (1923:12-25). He organized three experimental drill groups, from fourth to eighth graders and had them focus on (1) vocabulary, recording definitions, and writing illustrative sentences; (2)organization and important paragraph ideas in outline form ; and (3) retention-reproduction, rapid reading. In the meantime a control group maintained their regular work. After six weeks, measurments were made on the basis of the Thorndike -Mc Call Reading Scale, drill groups gained 3.81 points compared with 1.46 for the nondrill, control group.Yoakam and Trudy (1926:60-61) organized an experimental group of 24 fifth grade subjects who worked on the telling of what sentences say, selecting the main thought and the most essential sentences. At the end of the experiment, measurments proved that the experimental group median rose from 4.6 to 8.2 whereas the control group median remained at 4.1.

Lamoreaux et al.(1934:116) worked with sixth graders for 4.5 months, by three sixth grade teachers for the improvement reading in content areas. During the experiment one teacher worked with social studies, one with science and one with math. In each class the greatest gains were made by the lowest and highest groups. In another study handled by Deal (1934:258-273), college students were taught to find main ideas, to take notes and to look up vocabulary words. In this experimental work,emphasis was on drill in rate and comprehension with

exercises based on the students' texts. After a three semester period experimental students surpassed the control students.

Bennet (1953:302-303) worked with three groups of freshmen and tried three separate approaches during a semester; (1) analysis, interpretation, summarizing each paragraph, outlining selections, and precis writing (2) the same as (1) plus additional skill practice and a reading exercises done everyday; and (3) free reading accompanied by written analyses and outlining. At the end of this experimental study findings were as follows; the "extra " skill group scored best in everything except vocabulary. The free reading group scored lowest in everything except speed.

William and Stevens (1972:513-616) studied the effectiveness of teaching third to tenth graders, methods of locating the main ideas of paragraphs. The subjects were given exercises in underlining topic sentences and providing suitable titles for the paragraphs of graded workbook. Secondary students did better in identifiying main ideas than elenmentary students. The researchers came to a conclusion that either the skill of finding main idea is developmental or more real instruction is necessary. Another supportive report came from Glover et al.(1980:340) "feedback following underlining increased comprehension and produced more correct responses following feedback." So, we can coclude that underlining

alone will not facilitate improved comprehension.

2.2.2 Teacher Directed Skill Lessons

This group of investigators frequently helped students work with larger pieces of text, stressing superordinate-subordinate ideas.

Romanes (1884:141-150), concluded that for adult readers to achieve full comprehension, text should be read twice. In 1921, Yoakam voiced the same view that a single reading was not enough and suggested that the efficiency of various rereadings should be investigated. However, the major emphasis was on extensive reading, sometimes assigned in texts and sometimes in recreational reading

Eisenhart (1920:212-215) carried out a research to see the effects of reading and reporting easy books without teacher instruction. During the experiment retelling, outlining, stating main points, criticizing the author's views and the types of questions on standardized tests were emphasized. Third through eight graders worked in two separate groups for two 30 minute periods a week for three months. At the end, improvement was reported through percentages for both groups treated.

Rhoades (1929:771-773) focused on larger units of text.He worked with two groups of 30 students in each, and he gave specific training in context clues and finding central ideas of paragraphs in their regular literature

books. While a control group of 30 read any worthwhile books and discussed them in a variety of ways. The experimental group made the greatest progress on the Stanford Tests.

Two other investigators, Sayre (1940:561) and Rudolf (1949) conducted a research that demonstrated remarkable improvement for their samples on standardized tests after treatment. Sayre, after working with 1148 seventh through twelfth graders guided through the completion of current event skill exercises one period a week for three months, and 28 of 40 classes made superior gains greater than could be normally expected on the Master Achievement Tests. Rudolf's experimental group of 165 eighth graders were given instruction on" how to read it" skills and on comprehension and study skills accompanied by the regular curriculum. At the end of the semester, the experimental group made significant gains in social studies knowledge, study skills, and reading comprehension as measured by several standardized tests; while the control group showed less in the same areas.

Vacca (1980:512-518) studied the effects of holistic and subskill approaches on the reading comprehension of seventh through ninth graders in a corrective program. The holistic approach included four strategies-uninterrupted Sustained Silent Reading (SSR); Request, a reciprocal question approach between students and teacher. Neither comprehension approach was shown to

be superior when achievement test scores were analyzed.

In his experimental study Taylor (1986:99-104), gave instruction to sixth graders in how to generate main idea statements during one hour lessons for six weeks. But posttests provided limited support for the notion that is more useful to instruct students in reading for main ideas in social studies, by teaching them how to generate main ideas.

Adams,Carine, and Gersten (1982:27-54) conducted a study to evaluate the effectiveness of explicit systematic instruction as opposed to independent study with feedback or no instruction. Following training in either procedure, subjects wre given immediate and delayed posttests. The systematic instruction was significantly more effective on short term answer tests, but there were no significant differences among groups on the retelling.

Gersten and Carnine (1986:70-78) revealed results of experimental studies in favour of explicit, step-by-step training for helping intermediate and secondary students improve reading comprehension. During the experiment students were taught a specific strategy designed to foster the ability to draw inferences and develop the ability to detect faulty arguments. The experiment proved to be successful in targeted comprehension areas.

To determine the effects of study guides on content retention and on reading achievement, a study was

conducted by Austin (1982:3-4). The control group recieved their regular classroom instruction in history class; the experimental group received the same class instruction and, in addition, completed a study guide, for each chapter. Study guides included vocabulary development activities, questions for discussion, statements for acceptance or rejection and student questions. The results revealed significant difference in favour of the experimental group.

2.2.3 Rereading

The effects of a single reading versus two readings on comprehension were searched in an experimental study conducted by Good (1926:325-329). Results were inconsistent and did not provide any significant evidence to support either procedures.

With a slight difference, a similar study was conducted by Hill in 1964. He tested the influence of rereading and prereading directions on comprehension rate. He worked with 54 English education majors. Subjects read three selections, each with a different prereading condition. At the end a significant difference was observed in comprehension following rereading but no significant difference in prereading.

Hoon (1974:1057:1058) worked with 30 undergraduate students to asses the effectiveness of rereading, reading

with underlining, and reading with notetaking on multiple choice comprehension. However the results were not encouraging since there were no significant differences among the study groups. On the other hand, Orlando and Hayward (1978) found notetaking and mental reviewing to be superior to rereading with college students.

In 1985, Rashotte and Torgesen (1985:180-188) conducted a study to measure whether a procedure of repeated readings was more effective than an equal amount of non-repetitive reading and whether the degree of word overlap among passages affects comprehension and fluency. For this study ,learning disabled pupils (ages 8;6 to 12) were the subjects. They were asked to read a number of passeges using three treatments: (1) repeated reading of stories in which the number of shared words was low with a minimal relatedness of content (2) repeated reading in which the word overlap among passeges was high, and (3) reading passages in a condition similar to the second, but with each passage being read only once. This experiment lasted 15 minutes daily for seven days with four passages and comprehension passages. No significant differences were recorded for comprehension.

2.2.4 Reading Practice

The focal point in these studies was extensive reading sometimes assigned in text and sometimes in

recreational reading. Researchers believed that practice alone would improve comprehension. Some of the investigators encouraged students to read extensively in class or at home, accompanied by some other approaches.

Stone and Colvin (1920:348-354) worked with college students and at the end of their experimental studies were convinced that intensive reading of a difficult book was a vital force in promoting comprehension. In 1927 Good studied the extensive versus the intensive reading three pairs of parallel college students (30 to 35 in each paired groups). Not a significant superiority of one type of reading over the other was ascertained.(1927:487-485)

Rehder (1980:17-21) in a study investigated amount of reading attitude toward reading and reading achievement scores for high school juniors. Students were required to read a minimum of nine books over 18 weeks, to complete one or more assignments for each book and to pass an objective test on the book. A remarkable gain was observed on standardized testing, growth in enjoyment of reading also occured.

2.2.5 Study Skills

Almost ten percent of all the research studies scanned were focused on the teaching of study skills for the improvement of reading comprehension. In a large

number of studies, specific techniques (summarizing notetaking, underlining and outlining) were compared against one another or against rereading. Today it is becoming obvious that there is a renewed interest in summarizing as a useful technique in comprehension at all levels. There seems to be some promising findings that teaching summarizing will generate comprehension. Rinehart ,Stahl and Erickson (1986:422-438) point out the improvement of reading comprehension through teaching students how to summarize.

Beauchamp (1923:47-48), after a great deal of observation, devised a study plan for reading physical reading material for eighth graders. In this study he observed a process and and evaluated product through informal tests in both comprehension and speed. During the first five weeks, both the experimental and the control groups were subjected to carefully designed subject matter lessons. Both groups continued such lessons for the rest of the time, but skills and strategies were added to the experimental group's programme. Posttests scored the experimental group.

Cunningham (1982:42-47) tried to test the effectivenes of teaching the writing of summary sentences for paragraphs. During the study graduate students were given instruction on how to write "gist" statements for paragraphs and subsequently did better on simplified text analysis procedure; testing their ability to get the major

points.

Mc Neil and Donant (1982:215-219) reached at a conclusion that giving training on the rules of summary writing allowed all subjects to do better on comprehension questions and the procedure better written summaries.

These investigators proved teaching summarizing to be an effective approach in improving comprehension.

2.2.6 Word Study

Word study approach showed promise in a college level study carried out by Mc Donald and Pauk (1956:104-109). The central point in this study was word derivations and vocabulary in context. This study revealed significant results favouring the experimental group.

In 1986 Wixon examined the effects of using two different methods of instruction to preteach vocabulary in context (1986:317-329). The methods employed were dictionary versus concept. The results of the dictionary treatment showed that preteaching unfamiliar vocabulary increased childrens comprehension of the ideas that were related to the preinstructed vocabulary. The results of concept method were not significant.

The effects of preteaching vocabulary on the comprehension of scienctific text material were also considered by Vaughan et al.(1982:94-98). In this experimental treatement, vocabulary items related to key

concepts in the text was taught prior to reading by discussing terms similar to each vocabulary item and discussing similarities and differences. The experimental group scored significantly higher in response short answer comprehension questions.

2.2.7 Oral Presentations

Although oral reading was popular in the years prior to 1920, it was not considered as a means for improving comprehension but valued for itself.

From 1918 through 1964 there were no studies concentrated on oral presentations as techniques for improving reading comprehension. Since 1965 sixteen research studies were noted, all sharing an oral component as a means of improving reading comprehension.

In 1965 Cline worked with Spanish speaking fourth and fifth grade pupils. During the investigation an audiovisual program was used that focused on vocabulary and reading comprehension subjects were taught daily in half-hour sessions with the available equipment in the schools. Commercially available films ,slides and records were used in the experimental group, while a control group was treated without audiovisual support. After two years the experimental group made greater gains on standardized testing (1965:270-271).

Studies conducted by Lemons and Moore

(1982:212-216) revealed statistically significant differences favouring training in listening. Boodt (1984:390-394) emphasizing six critical listening skills on critical reading, tried to evaluate the effectiveness of a program. At the end the experimental group showed significant gains on the posttests.

In another experiment carried out by Laffey, Kelly and Perry (1980:189-193) the effects of repeated readings of taped literature on reading achievement were tested. The experimental group listened to taped stories for about 15 minutes daily, for 13 weeks. At the end no significant differences were reported between the groups.

2.2.8 Schema Activation

" Every act of comprehension involves one's knowledge of the world as well" (Anderson, Reynolds, Schallert, and Goetz 1977:369).Although the idea expressed by the above quote is certainly not new, schema theory as a formal concept was unknown until recent years. As Immanuel Kant claimed as long ago as 1781 " new information, new concepts, new ideas can have meaning only when they can be related to something the individual already knows." (Carrell and Eisterhold,1983:553-554). The majority of researchers who conducted investigations on

the improvement of reading instruction, began tpo concentrate on schema activation. Yoakam (1926:60) found that a test of prior knowledge given before reading improved comprehension. The role of background knowledge in language comprehension has been named as schema theory (Rumelhart,1980:33-58), which means any text either spoken or written does not by itself carry meaning. According to schema theory a text only provides directions for listeners or readers in drawing inferences by making use of their own previously acquired knowledge. This previously acquired knowledge is called the reader's background knowledge and the previously acquired knowledge structures are called schemata (Adams and Collins 1979, Rumelhart 1980). In an experimental study conducted by Johnson (1981:161-181), the effects of the complexity of the English prose on the reading comprehension of 46 Iranian intermadiate/advanced ESL (English As a Second Language) students were investigated. At the end of investigation, Johnson concluded that culturally determined background of the text, whether it is foreign or native to readers, has an effect on reading comprehension and unadapted texts of materials may cause problems of comprehension.

A number of researchers considered the value of using a structured overview in comparison with other methods prior to reading. Seidman (1984:14-16) compared the effectiveness of previewing and a structured overview

as a means of improving the reading comprehension.After 17 instructional sessions over a five week period, both experimental groups scored significantly better than the control groups on passages, accompanied by comprehension questions.

Other schema activation techniques that usually resulted in the treatment doing significantly better the control groups were stimulation games to teach superordinate ideas (Cohen and Bradley,1977:298-304). Embedded aids, in addition to questions, consisted of illustrations or headings inserted at some point in text.

2.2.9 Text Structure

Barnett (1984:1-13) focused on whether instruction in the organizational patterns of text would favourably influence comprehension, and investigated this possibility with college undergraduates enrolled in an introductory psychology course. Throughout the investigation, subjects recieved either a brief description of the organization of the text immediately prior to reading it or after reading but before recalling it, or they recieved no instruction. In all the cases,subjects getting instruction prior to reading did better on recognition and delayed free recall than subjects who recieved no instruction. Similarly, Slater, Graves and Piche (1985:189- 202) also reported better results when subjects

recieved prior information about the organization of expository passages

In 1986 Spiegel and Fitzgerald offered direct instruction in story structure over a five week period to fourth grade less abled readers. In the meantime control group was instructed in word study and dictionary usage. At the end the story structure group outscored the control on comprehension tasks, and produced more complex and more fully formed stories.

Varnhagen and Goldman, (1986:896-904) explored the effects on comprehension of teaching logical text relations to learning handicapped children. During the investigation children were taught to identify story information categories and casual relationships among them, to to complete macro cloze exercises, to create story trees,and to create and respond to inferential questions. This instructional period lasted eight weeks. Comprehension level was assessed using a variety of means and on all of them, children improved on answering "why" questions, on memory recall questions and on story structure questions. In this study with fifth graders, Taylor (1982:323-340) gave instruction to an experimental group,preparing them for how to prepare and study hierarchical summaries for segments of their health text. Pupils in the control group received the usual classroom instructional procedures involving questions and answers from the text. At the end a test of recall indicated

significantly higher scores for the experimental group. In a similar study Brooks and Dansereau (1983:811-820) concluded that schema training significantly facilitated the processing of expository prose.

Reed (1968:575-579) investigated the relative effect of the study of syntax and paragraph structure on reading comprehension wuth monolingual and bilingual high school students. The experimental group received semiweekly instruction on 30 study sheets emphasizing comprehension through the study of syntax and paragraph structure. The control group used regular texts and library books. Achievement on the Nelson Reading Test favoured the experimental group,with no significant differences between monolingual and bilingual students.

White, Pascarella and Pflaum (1981:694-704) reported significant results when using a sentence anagram/word grouping approach to improving sentence comprehension with multilevel learning disabled students. The experimental group made significant gains on a cloze test measure of reading comprehension.

The effects of teaching ninth graders to identify sentence kernels, logically analyze cognitive relationshios or understand vocabulary were tested by Hafner and Palmer (1980:34-37). Their investigation revealed that reading comprehension was significantly improved through sentence kernels and cognitive relationship training. The cloze procedure, using the

systematic deletion of words from text and replacement with a uniform blank line, was studied by a number of researchers. Among them are Kennedy and Weener (1973:524-541) studied the effect of individual training with the cloze procedure on third graders' reading and listening comprehension. The pupils were trained individually with printed or aural cloze procedure tasks. For the aural cloze training, a bell signalled a deleted word.One of two comparison groups received an individualized oral reading program, and the other remained in the regular class receiving no close instruction. The results of testing showed the visual training produced significant effects in listening and reading comprehension.

2.3 Reading Models, The Psycholinguistic Perspective and Strategy Use in Reading

2.3.1 Reading Models

Although it is not easy to categorize some first language reading models, those most frequently referred to in second\foreign language literature fall into three general categories: bottom-up, top-down, and interactive.

In bottom-up reading models, the written text(the bottom) is the starting point where the reader begins to construct meaning using the letters, words, phrases, and sentences found within and then process the text in a series of discrete linear fashion (Barnett a,1989:39). Before the higher-level mental stages of understanding transform and recode data, the data from the text must be received. In the bottom-up models, reading is analyzed as a process through which small pieces of information are absorbed and gradually added to the next pieces until they all make a meaningful whole. Clearly, these are text-driven models of comprehension. Although bottom-up models have not been favoured by second language reading specialists (Bernhardth,1986:93-115 Carver, 1977-78) they may provide insights into the approaches of less proficient second language readers.

On the other, hand top-down models also view

reading as a linear process, this process moves from the top, the higher-level mental stages, down to the text itself. In these models (including the psycholinguistic model), the reading process is driven by the readers mind at work on the text. The reader uses general knowledge of the world or of particular text component to make intelligent guesses about what might come next in the text ; the reader samples only enough of the text to confirm or reject these guesses (Barnett 1989c,:13). Reading models that can be considered strictly top-down are quite rare, because they quickly give way to interactive models, however two of them have had great consequence in second\foreign language reading theory; those of Goodman (1986) and Smith (1971,1982).

Interactive models constitute the third group of reading models, as they can be understood from their label interactive models theorize an interaction between the reader and the written text. Like top-down models they are reader-driven. They are not linear but rather cyclical process in which textual information and the reader's mental activities have a simultaneous and equally important impact on comprehension. In other words, as in top-down models, the reader makes use of his\her previous knowledge and understanding to guess about the text content, but as in bottom-up models the reader is still dependent upon what is in the text. Because of their influence on the second reading theory, interactive models are treated in depth here.Included are the models of

Rumelhart (1977:573-603), Stanovich (1980:32-71), Rumellhart and Mc Clelland (1986), the revised La Berge-Samuels (1974 :293-323). Just and Carpenter (1980:329-54), and Anderson and Pearson (1984:252-295).

Finally, a recent innovation in first language reading models derives from a renewed interest in writing Although many are not yet explicit, these models hypothesize a close relationship between the reading and writing processes and sometimes describe reading as a composing process. The composing model of Pearson and Tierney (1984) is a good example of a reading/writing model.

2.3.2. Implications of First Language Reading Models on Foreign Language Reading

Bottom-up Models: La Berge and Samuels (1974), emphasize the core of attention in processing information and the importance of automaticy in the reading process. In sum, they persume that readers probably can deal with only one thing at a time while reading but that they may be able to process many things at once as long as only one requires attention. They point out that reading process at each stage, must be automatic from when moving from visual perception to meaningfulness. Skilled readers,therefore, can allocate their attention to comprehension whereas beginning readers need more attention for decoding.

Gough's (1972) model of the first language reading

process is a detailed description of how a reader processes from the first moment of looking at the printed words until the time when meaning is derived from the words. Gough argues that readers read letter by letter, serially from left to right. To be meaningful, however, the letters must make sense in the mental lexicon, a dictionary of words and meanings stored in the human brain. According to Gough, the reader maps print onto a string of systematic phonemes, processes the words serially from left to right, and stores them in primary, short term memory. When the contents of primary memory are understood the sentence goes into what Gough calls 'P W S G W T A U', the place where sentences go when they are understood. Yet Gough offers no definitive explanation of this process. Just how a sentence is understood is under debate however, Gough clearly submits that when reading, the reader's focus is on the letter and word level of the text.

Like Gough, La Berge & Samuels assume that the reader's understanding depends on what appears in the text and that the reader performs two tasks when reading; decoding and comprehending. Certainly La Berge & Samuels take the reader into account more than does Gough; still the reader's primary function seems to be to process words from the printed page.

Carver (1977:78) introduces what he calls a theory of reading comprehension and RAUDING. The term 'rauding' links reading and listening comprehension. For Carver, the

sentence is the unitary expression of a thought; the primary purpose of most reading and auding is to comprehend the thoughts of the writer or speaker. His model falls into the, bottom-up category, because during rauding, the words are checked succesively to determine whether a complete thought is being formulated. And Carver hypothesizes that internal articulation aids comprehension he , thus, attributes a major role to phonological encoding. His theory refers only to "typical reading situations" which do not include skimming, scanning, studying, or memorizing. Such specificity limits the applicability of this model to general second language reading. Carver's model may ,however, be helpful in determining how second and foreign language reading differ from first language reading.

In the late 1960s and early 1970s, second or foreign language reading was viewed principally as a decoding process the reader attempted to reconstruct the writers intended meaning by recognizing the letters and words as meaningful units (Rivers,1968; Plaister, 1968; Yorio;1971). With the advent of Goodman's top-down view of reading as a psycholinguistic process, the bottom-up view of reading fell into disfavor. Yet the text-driven nature of bottom-up models may have more to say about weak second and foreign learners than has been acknowledged (Eskey,1988:93-100).

Top-down models: The theories of Kenneth Goodman and Frank Smith are prime examples of top-down views of

reading and have, so far been more often cited in second and foreign language reading literature than any other first language models(Bernhardth,1986). In fact, second/foreign language reading is still referred to as a psycholinguistic process; a term used by Goodman (1968:15), to define reading as "an interaction between reader and written language, through which the reader attempts to reconstruct a message from the writer. "This model argues that readers use their knowledge of syntax and semantics to reduce their dependence on the print and phonics of the text and specifies four processes in reading: predicting, sampling, confirming and correcting. First readers make predictions about the grammatical structure in a text, using their knowledge of the language and supplying semantic concepts to extract meaning from the structure. Then the print is sampled to confirm their predictions. They need not to see every letter or word. The more highly developed the readers'sense of syntax and meaning,the more selective the readers can be in sampling. Like Goodman and Smith (1972), emphasizes the importance of the reader's need to make predictions when reading, and further explains reading process a means for bringing meaning to print rather extracting sound from print.According to him, reading is based on comprehension; the reader brings certain prior knowledge (what he calls "nonvisual information") to a text and adds to it, whether in support or contradiction, the information and ideas gathered from the reading. And Smith (1972) argues that

reading is anticipatory; the interaction of the prior knowledge, and the purpose in reading lead readers to, anticipate text content (1972:5-9).

Interactive models of reading, usually respond to the question of how vocabulary skill relates to comprehension : on the one hand, they believe that higher-level processing stages influence lower-level stages, on the other hand they still recognize that comprehension also depends on the printed text. Rumelhart (1977) has been one of the first to argue against the linear processing presumed by bottom-up models, and suggests that "reading is at once a 'cognitive' process" (p.573). Rumelhart demonstrates the influence of syntactic, semantic, lexical, and orthographic information on the reader's perception of print, by citing a number of experiment results. To explain the guiding power of semantic knowledge over word perception, Rumelhart summarizes experimentation that reveals that a subject can decide more quickly if a letter string spells a word when a pair of words are semantically related, as in bread-butter or doctor-nurse, than if they are unrelated, as in bread-doctor or nurse-butter. According to Rumelhart, the reader looks at the words and spelling that are registered in a visual information store (VIS). The feature extraction device pulls out the critical features of these words and moves them into the pattern synthesizer. The pattern synthesizer is where all the reader's previous knowledge about the language spelling

patterns, syntax, vocabulary, semantics, and context come together to interpret what has been read. In general, the understanding of each of these levels of knowledge or analysis is influenced or partially determined by a higher level of analysis.

Stanovich (1980:32-71) adds a new feature to the interactive Rumelhart model by suggesting that strenght in one processing stage can compansate for weakness in another. He believes that problems in both the bottom-up and top-down models can be alleivated with his interactive -compensatory model. That is, bottom-up models do not allow for higher level processing stages to influence lower-level processing. And top-down models do not account for the situation in which a reader has little knowledge of a text topic and, therefore, can not form predictions.

In sum, Stanovich declares " interactive models assume that a pattern is synthesized based on information provided simultaneously from several knowledge sources. The compensatory assumption states that a deficit in any knowledge source results in a heavier reliance on other knowledge source, regardless of their level in the processing hierarchy."(1980:63). Rumelhart and Mc Clelland et al.(1986), by constructing computer simulations what they call parallel distributed processing (PDP) models, expanded Rumelhart's original interactive reading model.They together with a number of colleague, explain how the mind processes information.These models of human cognition recognize that many different pieces of

information and processes exist in the mind at once, all playing a part, constrained by them.The so called PDP models assume that information processing takes place through the interactions of a large number of simple processing elements called units, each sending excitatory and inhibitory signals to their units (I.10).As in Rumelhart's model these units may represent possible hypotheses about letters in a particular display or ideas about the syntactic roles of words in a sentence.In these cases, the signals relate to the strenghts associated with the various hypotheses, and the interconnections among units stand for the constraints known to exist between the hypotheses. Thus, the mind considers numerous options at once in order to direct muscles to perform a physical function, like turning a knob or, in order to comprehend written text. Rumelhart and Mc Clelland apply PDP models to information processing in general; the concept is appealing in terms of second language reading because it takes inti account the myriad functions necessary for understanding meaning through a foreign language.

In their model Kinstch, van Dijk and their colleagues (1978:863-94), emphasize comprehension to the exclusion of word identification, through they assume the latter must exist. They see the readers as creating another text, one that mirrors the author's version in varying degrees.The following are almost a complete version of their model, published in 1978; (1) multiple-microprocessing of the elements or propositions

in a text;(2) a drive toward text reduction (i.e., finding the gist or superordinate proposition, sometimes involving the use of inference); and (3) the use of memory and reader schemata to generate a new text built from the processed propositions. They suggest a schema theoretic view of mental process which is parallel in many ways to the schema based theories of second language reading. Their model is somewhat an exploration of the interworkings of the schemate and memory that readers must use to comprehend. They also argue that an adequate account of schemata structure will include information about the relationship among components and that inference must play a major role in complete theory of schema activation. According to their theory, any one of four kinds of inferences can occur either when textual information enters or is retrieved from memory. Inferences may be involved in any of the following situations; (1) deciding which schemata should be activated for the text;(2) deciding into which schema slot any textual item best fits; (3) assigning default values to any slot(that is imagining what element lacking in the text is necessary to complete the schemata; and (4) drawing locigal conclusions based on lack of knowledge within a schema.

Pearson & Tierney (1984), suggest that reading is the active process of negotiating meaning with their 'composing' model of reading. Pearson & Tierney consider writing writing and reading similar processes, and this relatively recent phenomenon is named "a reading/writing

model". Their model assigns to the reader four interactive roles (planner, composer, editor, and monitor) and views comprehension as the act of composing a new version of the text for an inner reader. Thus, this model is also known as a reader-driven reading process. The reader, as a planner, creates goals, mobilize knowledge or prior experience appropriate to the text, and decides how to align him or herself with the text. As a composer, the reader searches for coherence, often needing to fill in gaps in the text with inferences the editor stands back, in effect from the planner's and composerr's activities and examines their developing interpretations. Good editing behaviours include rereading, annotating the text page with reactions and questionning which particular version of the text is the most desired one. Finally, the monitor directs the work of the planner, composer,and editor, deciding which role should dominate the process at any particular moment.

In conclusion, the influence of interactive reader-driven models on second/foreign language reading theory has become popular in the last five years, with a spotlight on schema theory. In this model; the reader is seen as an active participant and previous experience play a major role in reader comprehension. The fact that the text can not be ignored makes the interactive view appealing, as does Rumelhart's view that impact of each processing stage can vary. Two aspects of reader-driven first language theory make especially good sense in terms of foreign and second language reading but so far recieved

little attention;reader variables and the role of inference.

2.3.3. Reading, from the Psycholinguistic Perspective

Especially in the late 1970s and early 1980s, reading specialists frequently applied first language psycholinguistic reading theory to second and foreign language without offering a formal model or second language research data to support their hypotheses.Eskey (1976) recognizes the complexity of the reading process, arguing that an adequate description would necessarily account for three spheres. In the sociolinguistic sphere the text and reader would be related respectively to a particular universe of texts and particular society of readers; Eskey's concept here foreshadows current focus on the importance of cultural schemata. In the linguistic sphere, a text would be related to the functions and forms of a given language, and the reader to his or her functional knowledge of that knowledge. Finally in the linguistic sphere, Eskey brings the reader and text in the mind of a single human being. Although he does not detail how this process works, Eskey seems to underscore the need to consider the reader and the text (Barnett,1989).

Saville-Troike (1979) focuses on the importance of sociocultural meaning for many different sorts of second language reading. She discusses the importance of readers'

ability to separate what the writer asserted from what he or she presupposes the reader knows. Such awarness of culturally loaded text is still a central issue for those subscribing to schemata theory. From a similar psycholinguistic perspective, Robinett (1980: 449-458) uses Wardhaugh's (1969) definition of first language reading to discuss the role in second language reading of meaning, visual clues to spelling probabilities of occurence follow from Smith's first language theory of predictibility within text and foreshadow the interactive view of the reader who brings meaning to the text.Her contextual-pragmatic knowledge is another way to refer to readers' cultural schemata.

A relatively early model of second language reading Coady's (1979:5-12) psycholinguistic model, is an attempt to apply Goodman's and Smith's first language theories to reading English as a second language. Coady postulates that comprehension results from the interaction of conceptual abilities, background knowledge and process strategies. Although Rumelhart was not directly cited, Coady lists individual process strategies quite similar to Rumelhart's levels of knowledge sources:

1. Phoneme-grapheme correspondence
2. Grapheme-morphophoneme correspondence
3. Syllable-morpheme information
4. Syntactic information (deep & surface)
5. Lexical meaning and contextual meaning
6. Cognitive strategies

7. Affective mobilizers (Barnett,1989:39).

In Coady's model it has been claimed that second foreign language reader, at the beginning level, first acquires the more concrete process strategies such as syllable-morpheme information, as the means for understanding whereas a proficient reader prefers the more abstract strategies that involve using syntax and semantics more frequently and sampling the text, as in Goodman's model. Coady also draws attention to the individual nature of the reading process:process strategies are "paths to comprehension which readers must travel but not necessarily in the same or to the same degree" (1979:8) Coady's work anticipates current interest in the individual reader's use of strategies to comprehend and sugessts that a reader tend to change processing strategies to deal with different texts and to achieve different reading goals. Furthermore they have the capacity to decide whether a particular combination of skills is effective or not for a particular reading situation. Rizzardi (1980) also applies to foreign language reading Smith's theory that readers use nonvisual information to understand a text. She considers a reading passage a chosive unit, she explores the need for readers to follow grammatical connectors (e.g.personal pronouns, demonstrative pronouns, demonstrative adjectives.), lexical connectors (e.g., synonyms, general words used to avoid repetition), and conjunctions as well as the need to make preliminary assumptioms about the content of the

written text. Such approaches are now considered vital reading strategies.

2.3.4 The impact of strategy use on reading comprehension.

The word strategy refers to the mental operations involved when readers purposefully approach a text to make sense of what they read. These may be either conscious techniques controlled by the reader or unconscious processes applied automatically (Barnett,1989:66). The strategy intervention studies have shown that while students can be trained to use learning strategies, they may have difficulty in transferring strategies to new tasks. A number of studies have suggested that learning strategy training needs to be conducted in conjuction with the regular course of instruction over an extended period of time, rather than as a separate intensive "how to learn " course (Campione & Armbruster, 1985; Chamot & O'Malley 1987). During their three-year project studies, carried out to investigate a number of aspects of learning strategy use, Chamot and Kupper (1989:14) have identified some general principles developed in prior second and first language studies. And classified learning strategies in three general categories:(a) metacognitive, (b) Cognitive, (c) social and affective strategies.Among them the principal reading strategies were cited as follows:(1) inferencing,(2) eduction, (3) elaboration, (4) transfer

(5) substitution, (6) cooperation, (7) self-evaluation.

Due to the variety of reading strategies and the nature of their application, have led the reading specialists to somewhat lack of consensus. Block (1986:463-94), observes the strategies of six ESL and three native English-speaking university-level students when analyzing the think aloud protocols.Finally she categorizes their strategies as general (comprehension-gathering and comprehension-monitoring) and local (attempts to understand specific linguistic units).

" General Strategies

* anticipate content
* recognize text structure
* integrate information
* question information in the text
* interpret the text
* use general knowledge associates
* comment on behavior or processes
* monitor comprehension
* correct behaviour
* react to the text

Local Strategies

* paraphrase
* reread
* question meaning of a clause or sentence
* question meaning of a word
* solve vocabulary problem." (p.463)

Block also refers to two different modes, derived from his

research findings. These are two modes in readers'strategies: extensive (when readers focus on understanding the authors' ideas and reflexive (when readers relate ideas an the text to themselves, affectively and personally. This concept of modes is helpful in understanding how individual readers see themselves in relation to a text.

Viewing the second language reading process as the interlingual transfer of reading skills from the readers'native language, Sarig (1987:107-120)), works from foreign language learners' think aloud data to classify their reading moves, or strategies, into four types. Below are Sarig's foar strategy types:

" ** technical-aid strategies are generally useful for decoding data at a local level. These are as follows;

* skimming
* scanning
* skipping
* writing key elements in the text
* marking parts of text for different purposes
* summarizing paragraphs in the margin
* using glossary

** clarification and simplification strategies show the readers' intention to clarify and/or simplify text utterances.

* substitutions

* paraphrases

* curcumlocutions

* synonyms

** coherence-detecting strategies demonstrate the reader's intention to produce coherence from the text.

* effective use of content schemata and formal schemata to predict forthcoming text.

* identification of people in the text and their views and actions.

* cumulative decoding of text meaning relying on summaries given in the text.

* identification of text focus.

** Monitoring strategies are those displaying active monitoring of text processing, whether metacognitively conscious or not.

* conscious change of planning and carriying out the tasks

* deserting a hopeless utterance (" I don't understand that, so I'll read on").

* flexibility of reading rate

* mistake correction

* ongoing self-evaluation."

Although the reading theorists' viewpoints, on reading strategies close to each other, they vary greatly in nature. In fact,the strategies are utilized in

combination with each other (Kern,1988) and that individual readers use different terminology to explain the strategies they are using, therefore a conclusive list of reading strategies may not be possible.

2.3.5 Research Studies Related to Strategy Use

Aside from Hosenfeld's pioneering studies (1977a/b,1979,1984), only recently researchers have become interested in strategy use in second foreign language reading. They are examining different aspects of reading strategy use: (1) despriptions of strategies naturally used by second or foreign language readers; (2) the transfer of first language strategies to second or foreign language reading; (3) the actual effectiveness of strategies generally deemed "successful" ; (4) learner's thought about what they do when they read their metacognitive perception); (5) the relationship between readers' metacognition and their comprehension and actual strategy use; and (6) the usefulness of training students to use productive strategies.

During her studies conducted on strategy use in reading, Hosenfeld, (1977a:110-23) noticed that students can observe and verbalize their learning strategies, and their strategies are often quite different from the strategies their teachers assume they are using. In her original study on reading, Hosenfeld (1977 b:53-78) asked forty adolescent foreign language students to think aloud

as they read silently. From the self reported data, Hosenfeld constructed reading maps and she discovered distinct differences between the strategies used by successful and unsucessful readers.For instance, succesful readers kept the meaning of the passage in mind while reading, read (translated) in broad phrases, skipped words they saw as unimportant to total phrase meaning, and had a positive self-concept as readers. Unsuccessful readers lost the meaning of sentences as soon as they decoded them, read(translated) in short phrases and seldom skipped any words as unimportant but rather viewed them all as 'equal' and had a negative self concept as readers.

In another study Hosenfeld (1979,1984), worked with two ninth grade foreign language readers who use think-aloud introspective/retrospective procedures, to uncover their problem-solving strategies, and the results indicated precisely how these individuals read before and after recieving training in particular reading strategies. However, Hosenfeld hesitates to dictate any particular pedagogical method based on her exploratory studies.

2.3.6 Metacognitive Awareness and Effectiveness of Strategy Use

In spite of the ongoing discusssions of whether reading strategies can be transferred, a number of specialists have called for pedogogical methods to develop students' strategies. This relatively new emphasis, have

led the researches to a thorough examination of the effectiveness of reading strategies in a second or foreign language without reference to readers' first language reading proficiency. Barnett (1988:150-62) and Kern (1988) investigated whether experimental groups who have not been taught specific reading strategies. Casanave suggessts the possibility of a third type of schema, 'strategy schema'; "the generic knowledge we have of the routine monitoring and repair strategies available to us as we read "(1988;297).

Kern (1988), after undertaking a project to train American students of intermediate French to use specific strategies designed to help them in comprehension, hypothesized that foreign language readers provided with reading strategies would automatize their lower-level processing skills to a greater degree than their untrained peers and therefore would use their cognitive resources were efficiently comprehending more as a result. These research finding support the pedagogical calls for teaching students to use reading strategies. But so far, they are a few in number and experimental studies on this issue, differ in format and objective, furthermore much of it orginates from ideas teachers derive inductively from working with their students. On the other hand, although the number of research studies are not high, they are all encouraging and promising findings and simply tell us that effectiveness of strategy use in reading comprehension is worth studying.

2.4 Related Needs Analysis Surveys in Turkey and in the World.

In this section of the literature survey similar studies of needs analysis will be presented. First of all it would be sensible to a have look at the ones done at the Faculty of Engineering, University of Gaziantep (formerly an extension campus of METU). Afterwards some outsanding recent needs analysis surveys in the world will be examined.

In 1983, Karatas conducted a study to identify certain variables involved in an ESP course design for preparatory school students at M.E.T.U, Gaziantep Campus. And she came up with certain criteria which would account for the framework of such a course. In this study, questionnaires were administered to the students and to the academic staff in order to assess the target competence needs of the students. The results have revealed that, the students should adopt reading strategies to enable them to read and understand the textbooks and other materials related to their field of study in the freshman classes, and also it has been suggested that they should be equippped with reading and other study skils, so that they could follow, summarize, and take notes from the printed sources related to their field of study.

In the conclusion of the study, Karatas voiced the necessity of conducting needs analysis, before admitting

students into ESP courses. In addition, she also emphasized the need for colloboration of the subject matter specialists with the ESP teachers.

Another study, to identify the academic needs of the freshman students at M.E.T.U, Gaziantep Campus, was conducted by Kahraman (1983). In this study findings have demonstrated that reading was considered one of the most essential skills by the instructors of all classes, except for the senior population that regarded it as the second in ranking (1983:156). Kahraman concluded that the students should be trained in the specialized areas such as reading questions in the essay type exams, reading their own text books and she also emphasized the importance of training students in the areas such as extensive reading, intensive reading, skimming, scanning and the like.

In the recommedations section of the study, Kahraman, like Karatas, emphasized the importance of a thorough needs analysis prior to course design and material selection for the Freshman English program.

A third needs analysis was carried out by Kahraman (1988), with a view to obtain information about the freshman students' minimum competency level of English that they are expected to display when they actually start to study their target specialism. This survey also indicated that prior to any English learning process needs analysis should be carried out to achieve the objectives of the course.

As for the analysis surveys conducted to identify learner needs, Ostler's (1980;489) investigation sets a good example for our own case. This study was conducted to assess the advanced ESL (English as a Second Language) students'academic skill needs to complete their studies successfully.

The teachers at the American Language Institute, University of Southern California, had sensed for some time that many of the real needs of the students were not met. They often received complaints that the reading and writing assignments were of no use in the students' major fields. On the other hand, there were frequent requests for help on writing resumes, research proposals, and critiques. Even more curicial to the greater student population was their ineptness at note-taking and their poor performance on some types of exams. The instituton needed to know if these problems indicated a need for changes in their advanced class syllabus. A questionnaire was compiled for students to assess their academic needs.

In a similar study of needs analysis, Zughoul and Hussein (1986:133) carried out a case study of needs analysis at Yarmouk University. The study attempted to explore the needs for English at this University in Jordan For this purpose separate questionnaires for students and faculty were developed, piloted and administered. The questionnaires investigated three major issues; the extent of English language use at the University perception of the students'language abilities; and perception of the

students' language abilities; and perception of English language needs. Results indicated the widespread use of English in most educational setting except for class discussion and student questions in lectures. There was also evidence that students tended to overestimate their abilities in the different language skills, while a more realistic estimate was reflected in the responses of the faculty. Both students and faculty agreed agreed on the primary importance of the listening skill; thereafter their opinions tended to diverge. In the cocnlusion, implications for the teaching situation at Yarmouk and comparable institutions were discussed and a stronger orientation to ESP advocated.

CHAPTER III

PROCEDURES FOR DATA COLLECTION AND METHODOLOGY

3.0 Presentation

At the begining of this study, data collection was done in two steps and opinions of all the related parties, (freshman students' Engineering and Freshman instructors') were asked to assess the needs, expectations, suggestions and lacks of the freshman students', in terms of reading comprehension skill, who are taking English 101 and 102 courses. This chapter is mainly concerned with the structure of the questionnaires, how and to whom they were administered. Characteristics of the subjects, questionnaires and the procedures for data collection and the methodology are also explained.

3.1 Preparation for Data Collection

After surveying the literature, it has been realized that several methods have been used in collecting information for the descriptive type research studies. However, selection of the method or the

instrument ,of course, should be determined by the features of the situation that the investigator is involved in. The most common and practical method for collecting data in many of the descriptive cases is administering questionnaires (Gay, a1981). In this study, three different questionnaires have been used to collect data for the investigation of the problem described in the first chapter. When a questionnaire is used, the investigator must determine what kind of information he requires and designs questions in such a way that he obtains the intended information.

It is believed that lenghty questionnaires turn people off and turning people off is not a good way to get them to respond. However, sometimes situation and the nature of the problem investigated demand long and detailed questions; therefore, both the content and format of a questionnaire must be planned carefully. No item should be included that does not directly relate to the objectives of the study (Gay, b1981). In the light of this advice the first version of the questionnaires were piloted and after some rearrangements they were administered as reliable data collection tools.

3.2 Subjects and Their Characteristics

The subjects of this investigation consisted of 360 freshman engineering students that make up the total number of students taking English 101-102 courses during

the year the study was conducted.(1991-92 academic year) On the other hand nine freshman instructors and 16 subject specialsts were also involved in the study as sources of information. As the main purpose was to analyze the needs of the freshman students the first questionnaire was administered to the freshman students (see Appendix A), the second one was administered to the Freshman Instructors (see Appendix A-1), finally the third was administerted to the Engineering major subject specialists. (see Appendix A-2) To get a complete perspective of what the students need for improving reading comprehension skill throughout their study at the Faculty of Engineering.

3.3 Characteristics of the Questionnaires

The first set of questionnaire which consisted of 40 close-ended questions was administered to the total number of the freshman students for gathering information on their needs, current performance, wants and deficiencies. Apart from assesing their target competence needs, analyzing the present learning situation was also among the aims of the study and therefore the students' questionnaire included questions to achieve this goal.

Another questionnaire was administered to nine freshman instructors, asking for their opinions on the Freshman English program, students' reading comprehension performance, weekly teaching hours, and what

they consider to be the main problem for reading comprehension failure. This questionnaire consisted of ten questions, and only two of them were open-ended questions.

The third group, the subject specialists, were given the same questionnaire as the freshman instructors, with a change in one question only.(question 6)

Questions in the questionnaire for the freshman students are all closed-type, and all the questions required subjects to choose one of the five alternatives following the question. However, the questions in the questionnaires administerd to the instructor groups , sometimes required ranking of items according to the order of importance, assigning each item certain numbers or asked them to choose "Yes", "No" alternatives given below the questions. In addition, two open-ended questions were also included in the same questionnaires. When designing the questionnaires, similar studies were examined and some of them were adapted which were used previously, such as the questionnaires used in Ostler's (1980;490) needs analysis survey and Mackay's (1979) views were also taken into consideration in the development stage. The two questionnaires were piloted and modified in the light of comments received from 40 respondents. (30 freshman students, 10 instructors)

As it has been stated previously, the questionnaire administered to the freshman students (see Appendix A-1) consisted of 40 close-ended questions aiming at eliciting answers whether the general objectives of the

English 101-102 Courses have been realized, through the use of the text books and to what extent they have been reached; if not, what are the failing points of the text books, classroom procedures and students' strategy use while reading for comprehension.

In the first three questions the purpose is to get the students opinions about under what circumstances they think, they would need reading comprehrension skill.

In questions 4 and 5 the students are asked whether and to what extent, they could employ reading comprehension techniques such as skimming and scanning. In the same way students are asked about their ability in distinguishing facts from opinions and summarizing texts via questions 6, 7 and 8.

Question 9 is intended to determine to what extent the students are dependent on dictionary use in getting the meaning of an unknown word. Questions 10,11,13 and 16 are related to measuring the students' ability in analyzing paragraphs, sentences, and words i.e., the mechanics of a text assigned for comprehension. Whereas question 14 is devoted to judge whether they can guess the meaning of a word or a phrase with the help of the context.

In question 12 the students' opinion, concerning the paragraph cohesion was asked.

In question 17 students were questioned about an important aspect of reading comprehension procedure; the reference words, while the 18th question asked their opinion whether they could understand sentence and

paragraph connectors, which are also essential ingredients of a better comprehension.

19th, 20th, 21st and the 22nd questions asked for the students' opinions in that, whether they could identify topic sentences, main ideas, major and minor supporting sentences in a reading text.

Questions 23 and 24 required students to state if they could do phraphrasing and then presenting this in written form, as a follow-up reading activity.

Question 25 is designed to see if they encounter "critical" reading passages; if yes, how frequently they are. The 26th question is related to measuring their ability in drawing inferences and conclusions from a reading passage.

Questions 27 and 28 are aiming at getting the students' opinion whether they need reading comprehension skill more than any other, and whether the speed rate of reading affected general success throughout their education at the University.

In the 29th question the students were invited to state whether sufficient time was allocated for English 101-102 Courses in the whole program.

Question 30, 31 investigate whether the Preparatory School program contributed to their reading comprehension.Similarly the 32th question tries to identify to what extent Preparatory School and Freshman English programs affected their general success in their engineering courses.

In questions 33, 35, 36, and 37 students are asked to give their opinions, cocerning the classroom procedures; whether effective techniques were employed to improve comprehension and student participation, by the instructors. And also to what extent students find reading comprehension passages interesting and encouraging for participation. Apart from 33, 35, 36, and 37 question 34 is inserted to get an idea about whether supplementary reading materials can be covered in the classroom.

Questions 38 and 39 are targeted to elicit information whether students consider the reading passages in English 101-102, beyond their level of perception.

Finally, the 40th question, being the only common question for all the parties involved in the reasearch study, requires the students to express their opinions whether an elective reading course is needed in upper classes.

On the other hand, the freshman instructors' and the subject specialists' questionnaires comprised of ten questions (see Appendix A-1 and A-2) designed to obtain information on several issues.

In the questionnaires mentioned above, questions 1,3 and 5 required instructors to rank their choices concerning the priority of language skills (reading, writing, listening, and speaking) necessary for the freshman students, the reading strategies that the students fail to employ, the main problem which they think to be the main cause for defective comprehension,

respectively. In all the other questions the subjects are questionned about the freshman students' general reading comprehension text books and weekly teaching hours devoted to English 101-102 courses. And also their opinions were asked about whether a special reading course is needed in upper classes for all the engineering students, and whether a committee would be of any help to provide flow of information between the departments. Finally, an open-ended question is provided to give the subjects a chance to express their ideas on the issues, other than the ones already mentioned in the framework of the questionnaires.

As stated previously, the questionnaires included open-ended, close-ended and ranking type questions.The answers to all of the questions will be discussed in detail in the following chapters namely, in 'the analysis of the answers'. The close-ended questions are of two types, in the first type (see the freshman students' questionnaire in Appendix A) five choices are provided following each question, as never, rarely, frequently ,generally, and always. In this way, students' opininons would be obtained on a broader basis. The second type of close-ended questions are inserted in the questionnaires administered to both instructor groups and Yes, No alternatives are provided following each question. Answers are limited to only Yes or No choices because a clear-cut response was required for a sound understanding of the problem being discussed.

The open-ended questions appeared in the instructors' questionnaires only, one as a question the other as an option in a rank-type question.

The third group comprised of items which required to be put into an order of importance, i.e., the respondents were presented with a set of items and were asked to put these items into an order of importance, numbering the most important item (1) and the least (4).(see Appendix A-1, and A-2)

3.4 Methodology and the Procedures for Data Analysis.

This section briefly introduces how the information collected was analyzed. As stated previously the number of the student group whom the questonnaire to be administered was 360 in total. It was later found out that some of the questions were left unanswered and some answer sheets were not answered at all. Therefore in the actual analysis process the incomplete questionnaires were discarded. So the students' questionnaire results were processed, classified and analyzed on the basis of the completely answered questionnaires with the intention of evaluating the gathered data in an integrated fashion.

Raw data needed for the computer calculations were obtained by tallying on the 'Fortran Matrix Coding Forms' provided by the computer center of University of Gaziantep. Since the number of questions and the number of choices were high, the tallying task has been the most

difficult of all, in the entire process. The answers given by the students were processed on the basis of frequency occurence until the concrete percentages were obtained from the computer.

The two instructor groups involved in the study were given the same questionnaire which consisted of 10 questions, because the needs analysis procedure required the instructors' views on the problem being studied. Therefore, the questionnaire was administered to 20 randomly selected Engineering specialists (instructors) ,16 of them returned and were evaluated, while 9 Freshman instructorts were given the same questionnaire and all of them returned. For computer calculations, raw data were obtained by sorting out the results on the 'Fortran matrix coding form' and an adapted version of the 'Statistical Package for the Social Sciences' (SPSS) (Nie, 1975) computer program was used. For instance, all the questions in the instructors' questionnaire were tested through a nonparametric chi square test of significance, (Gay, 1981:325), after obtaining the concrete percentages of the valid cases. Chi square is a test of statistical significance, and it helps us to determine whether a systematic relationship exists between two variables. This was done by computing the cell frequencies which would be expected if no relationship is present between the variables given the existing row and column totals(marginals). The expected cell frequencies are then compared to the actual values found in the table according

to following formula: (Nie, 1975:223)

$$X2 = \sum \frac{(fo-fe)2}{fe}$$

In this formula fo equals the observed frequency in each cell, and fe equals the expected frequency calculated as;

$$fe = \frac{ci\ ri}{N}$$

where ci, is the frequency in a respective column marginal, ri, is the frequency in a respective row marginal, and N stands for total number of valid cases. In the formula, sigma ($\sum$) refers to the sum of all chi square values. This formula was used for questions 2,3 and 5 in the instructors'questionnarie.

In order to determine whether a systematic relationship does exist, the calculated chi square value was compared to the appropriate value in the 'critical values of chi square table'. However, before referring to the critical values table, degrees of freedom were calculated for each table separately. The degrees of freedom vary with the number of rows and columns in the table. For questions 2, 3, and 5 in the instructors' questionnaire (C-1) (R-1) formula was used to calculate

the degrees of freedom.

On the other hand, for questions 1,4,6,7,8, and 9 a different chi square formula was applied because, the results were tabulated in the form of 2x2 tables. The formula is as follows; (Nie, 1975:223)

$$X2 = \frac{N\,(AD-BC)2}{(A+B)\,(C+D)\,(A+C)\,(B+D)}$$

in the formula N equals the total number of valid cases, whereas A,B,C,D stand for the cells of a 2x2 table illustrared as follows;

A	B
C	D

The formula for the calculation of degrees of freedom is as follows;

$df = (C-1)\,(R-1)$, where C equals the number of columns and R equals the number of rows.

During the analysis of the data obtained from the Freshman students' questionnaire, a separate table was prepared for each question, showing the concrete percentage distribution of responses to each choice. As for the analysis of instructors' questionnaire results, a table was reserved for questions 1,4,6,7,8,and 9 separately, whereas aech item in the ranking-type questions (2, 3, and 5) requried a separate table.

The tables tested through chi square formula were provided with the results, by identifying; degrees of freedom (df), P= 0.05, which indicates the column where the the degree of significance was found, calculated and table values of X2 were also given as Xc and Xt, respectively. The last marking (-) indicates that no statistically significant relationship was found, whereas (+) means, there is a statistically significant relationship.

CHAPTER IV

ANALYSIS OF THE DATA

4.0 Presentation

In this chapter the questionnaire results that were obtained from all the subjects will be analyzed, and comments will be made based on the findings of both the open-ended and the close-ended questions. The responses of the Freshman students will be presented below first, since they are the largest group whose opinions were referred to with 40 close-ended questions. For the purpose of a clear and easy-to-follow presentation of the analysis of the results , each question will be tabulated, accompanied by the original question, and the interpretation will appear right under the tables. In this way the need for going back pages, for each question discussed, will be eliminated to a great extent.

4.1 Analysis of the Freshman Students' Questionnaire Results

As mentioned in the previous chapter, 360 Freshman students were administered a 40-question-questionnaire to obtain information on their needs, lacks, and expectations in terms of reading comprehension skill. In this section of the fifth chapter, responses to each question will be presented in percentages and dealth with individually. And the number of actual respondents will also be given for each table together with the distribution of the percentages.

Question 1. " I need reading comprehension skill when reading my text books and the handouts."

Table 1.

CHOICES	N	%
Never	22	6.65
Rarely	89	26.89
Sometimes	99	29.91
Frequently	87	26.28
Always	34	10.27
TOTAL	331	100

The responses to the first question reveal that 29.91 % of the students who responded this question think that they are SOMETIMES in need of reading skill when reading their text books and handouts. While 26.89 % claim they need it RARELY and 26.28 % say they need it FREQUENTLY. It is also noteworthy that a small minority of the respondents believe they NEVER need reading comprehension skill(s) when dealing with the course materials. The distribution of the percentages among the choices illustrates that the Freshman students do not seem to have appreciated the value of reading comprehension skill when dealing with their own printed course materials, which are the only access to several sources at an English medium faculty. Furthermore 6.65 % of them tend to ignore this skill completely, most probably, with the idea that having known reading comprehension procedures would not contribute to their understanding a lot.

Question 2."I need reading comprehension skill when reading periodicals, magazines, and articles related to my engineering major."

Table 2

CHOICES	N	%
Never	33	10.03
Rarely	75	22.80
Sometimes	79	24.01
Frequently	86	26.14
Always	56	17.02
TOTAL	329	100

As the answers to the second question reveal, 26.14 % of the respondents think that they are FREQUENTLY in need of reading comprehension skill when dealing with magazines, periodicals, and articles in their own specialism. On the other hand there is a consistency among the distribution of choices preferred, as RARELY 22.80 %, SOMETIMES 24.01 %, and FREQUENTLY 26.14 %, they all make 72.95 % out of 100 %. Due to almost evenly distribution of answers, we can infer that Freshman students, more or less, attribute importance to reading comprehension skill when reading their field-related materials indicated in the question. Only a minority ,10.03%, believes they never need such skills.

Question 3."I need to employ reading comprehension skill(s) when answering exam questions (English 101-102 and the others)."

Table 3.

CHOICES	N	%
Never	13	3.93
Rarely	50	15.11
Sometimes	58	17.52
Frequently	108	32.63
Always	102	30.82
TOTAL	331	100

Among the answers to the 3rd question, the 4th choice (FREQUENTLY) recieved the highest credit being 32. 63 %. In the second place comes the 5th choice (ALWAYS) with a slight difference being 30.32 %. The results indicate that at a higher rate, students believe they need to employ reading comprehension skill(s) during the exams. On the other hand, if the answers given to the first three questions are considered together, it would be possible to infer that the Freshman students are aware of the fact that they need reading comprehension skill when reading text books, magazines, journals, articles and exam questions as well. As it can be seen,a small minority of the students seem to underestimate the necessity of reading skill in the areas cited in the first three questions.

Question 4."I can locate the general message when reading a passage for comprehension."

Table 4.

CHOICES	N	%
Never	21	6.58
Rarely	72	22.57
Sometimes	59	18.50
Frequently	142	44.51
Always	25	7.84
TOTAL	319	100

As for the students' ability to locate "the general message " in a reading text, the 4th question provides us with sufficient information. The distribution of percentages among the choices indicate that only 7.84 % of the respondent students are ALWAYS able to find out the general message in a reading passage. This rate is quite low and signals that students are not well eqiupped with the necessary procedures to extract such a message. The highest percentage 44.51 %, which cooresponds to the 4th choice (FREQUENTLY) can be considered a satisfactory level, because at Freshman level, students are expected to get"the general message"of a text without much difficulty.And also this is one of the most essential strategies to be employed when compared with other reading comprehension strategies. On the other hand, 6.58 % of the

respondents admit that they are not able to find out "the general message " at all. This is another significant aspect of the answers given to question 4.

Question 5. " I can find out the specific information in a reading passage such as a date, a place, an event."

Table 5.

CHOICES	N	%
Never	14	4.42
Rarely	61	19.24
Sometimes	90	28.39
Frequently	130	41.01
Always	22	6.94
TOTAL	317	100

In question 5,the students' opinions are asked about the extent to which they can employ scanning procedures.The answers indicate that,FREQUENTLY, majority of them are able to find out specific information, since the 4th choice was preferred by 41.01 % of the total respondents and 28.39 % think that they can locate specific information SOMETIMES , the third major group with 19.24 %, claim that they can perform this skill RARELY. Another significant result is that 4.42 % of them are not capable of carrying out scanning procedures, whereas a group of 6.94 % believe they can do this ALWAYS. Based on the findings of the last two questions we can conclude that reading comprehension techniques and strategies should be emphasized throughout the English 101-102 Courses, to yield better results.

Question 6. "I can comprehend a technical or scientific reading material to such an extent that I can retell the same reading passage in my own words."

Table 6.

CHOICES	N	%
Never	92	27.14
Rarely	132	38.94
Sometimes	50	14.75
Frequently	59	17.40
Always	6	1.77
TOTAL	339	100

The answers to the 6th question clearly show that Freshman students,with a high percentage, are not able to read a text comprehensively. The highest frequency of preference observed in the 2nd choice(RARELY) as 38.94 %, telling us that the remaining 61.06 % of the respondents are quite poor in achieving the skill mentioned in the question. Because only 1.77 % of the students think they are ALWAYS competent enough to read comprehensively. Another important point here to be noted is that the frequency of answers given to the 1st choice which portrays the students' failure from a different perspective since 27.14 % of them find this task difficult to perform and they say they NEVER can do this.

Question 7."In a reading passage I can distinguish facts from opinions."

Table 7.

CHOICES	N	%
Never	20	10.10
Rarely	74	37.37
Sometimes	48	24.24
Frequently	50	25.25
Always	6	3.03
TOTAL	198	100

The results of this question show that only 10.10 % of the students surveyed believe that they are not able to carry out this task while 37.37 % RARELY, 24.24 %, SOMETIMES, 25.25 % FREQUENTLY and 3.03 % of them think they can do this ALWAYS. In general this table does not present an optimistic picture in terms of the students' ability to distinguish facts from opinions.

Question 8. " After reading a passage (text), I can take short and concise notes. "

Table 8.

CHOICES	N	%
Never	56	17.82
Rarely	106	37.72
Sometimes	60	18.52
Frequently	87	26.85
Always	15	4.63
TOTAL	324	100

In this question the choices most frequently preferred are the 2nd (RARELY) and the 4th (FREQUENTLY) being 32.72 % and 26.85 % respectively. The lowest rate of preference is on the 5th choice, ALWAYS, with 4.63 %, that signals the truth that only a small minority of the respondent students are capable of taking notes. On the other hand, a significant percentage of the students,17.28 %, have admitted that they were NEVER able to perform this task when necessary.

Question 9." I try to find out the meaning of unknown word(s) with the help of dictionary."

Table 9.

CHOICES	N	%
Never	33	9.79
Rarely	101	29.97
Sometimes	77	22.85
Frequently	88	26.11
Always	38	11.28
TOTAL	337	100

The answers to the 9th question illustrate that 29.97 % of the students surveyed, tend to refer to a dictionary for the unknown vocabulary items RARELY, while 26.11 % said FREQUENTLY and 22.85 % said they SOMETIMES referred to dictionaries for the unknown items in a reading text. On the other hand, the extreme choices NEVER and ALWAYS were given the lowest credit, the former 9.79 % and the latter 11.28 % . These findings may suggest that students ,in majority, more or less depend on dictionaries for the vocabulary items to be identified.

Question 10. " I can understand a reading text at sentence level."

Table 10.

CHOICES	N	%
Never	15	4.52
Rarely	64	19.28
Sometimes	109	32.83
Frequently	133	40.06
Always	11	3.31
TOTAL	332	100

In the 10th question, again, the weight of the responses fall on the two extreme choices (NEVER & ALWAYS).Especially the frequency of the responses distributed to 3rd and 4th choices obviously reveal that majority of the Freshman students surveyed, can understand a reading text at sentence level. This also exemplifies the fact that the students think they do not have much difficulty in understanding a text at sentential level.

Question 11. " For a better comprehension, I can analyze the paragraphs and break them into small pieces of information."

Table 11.

CHOICES	N	%
Never	24	7.23
Rarely	98	29.52
Sometimes	102	30.72
Frequently	99	29.82
Always	9	2.71
TOTAL	332	100

The results of this question reveal that the highest percentage of the students namely, 30.72% said they were SOMETIMES capable of analyzing a text to contribute to its comprehension. The findings suggest that a large proportion of the respondents can perform this task in different frequencies, however the most significant item is the 5th one, because it indicates that only 2.71 % of them could do this ALWAYS. Based on the facts gathered, we may conclude that the students are not successful at a reasonable level in the analysis of text for comprehension purposes.

Question 12." I can identify the meaning ralationship between the consecutive paragraphs of a reading text."

Table 12.

CHOICES	N	%
Never	15	4.60
Rarely	76	23.31
Sometimes	103	31.60
Frequently	125	38.34
Always	7	2.15
TOTAL	326	100

In question 12, answers gathered concerning the idenification of meaning relationship among the paragraphs of a text. The most popular choices are FREQUENTLY with 38. 34 % and SOMETIMES with 31.60 %, total of the two coming up to 69.94 %.The results indicate that majority of the respondents are successful in relating the consecutive paragraphs and can trace the main idea throughout the whole text. On the other hand, the extreme choices were given the lowest credit; NEVER being 4.60 % and ALWAYS being 2.15 %.

Question 13."I can extract the meaning of an unknown word by dividing into its components, such as prefix,root, and suffix."

Table 13.

CHOICES	N	%
Never	59	18.27
Rarely	105	32.51
Sometimes	77	23.84
Frequently	71	21.98
Always	11	3.41
TOTAL	323	100

As it can be seen from the table above, most of the preferences are in favour of the second choice RARELY, (32.51%). In the second place comes the third choice SOMETIMES preferred by 23.84 % of the total respondents. Another remarkable point here is that, 18.27 % of the respondent students answered this question as NEVER. In other words, 18.27 % of the total respondents are NEVER able to analyze an unknown word into its components to facilitate comprehension. On the other hand, only a small minority of the students,3.41 %, claim they are ALWAYS successful in the word analysis. Although majority of the respondents have claimed that they were either SOMETIMES or FREQUENTLY successful in this task, the answers to the first choice, NEVER, appears to be alarming because, this is one of the essential skills that the students are expected to have when reading for comprehension.

Question 14." I can guess the meaning of an unknown word by the help of context."

Table 14.

CHOICES	N	%
Never	38	11.52
Rarely	133	40.30
Sometimes	70	21.21
Frequently	79	23.94
Always	10	3.03
TOTAL	330	100

According to the frequency distribution of the responses, a majority of the respondents, 40.30 %, can RARELY guess the meaning of an unknown word using contex, while 11.52 % of them can NEVER do this.Yet, 23.94 % of the total respondents claim that they can FREQUENTLY perform this.Only a small minority (3.03 %) find this guessing task easy and say they can ALWAYS do this.

Question 15." I can make use of punctuation clues to extract the meaning of unknown vocabulary items."

Table 15.

CHOICES	N	%
Never	103	31.89
Rarely	126	39.01
Sometimes	57	17.65
Frequently	28	8.67
Always	9	2.79
TOTAL	323	100

In this question the distribution of pecentages shows a similar pattern to that of the 14th. As the majority of the respondents, 39.01 % , again claim that they can RARELY guess the unknown word meanings by the help of punctuation clues. However, in this question a significant percentage of the students, 31.89 %, claim that they can NEVER quess the meaning in this way. Based on the finding it can be said that the Freshman students need to improve their word guessing abilities in either procedures mentioned in questions 14 and 15, because being able to employ the guessing procedures RARELY is not a satisfactory level.

Question 16." I can divide sentences into meaningful small units, for a better understanding of the reading text."

Table 16.

CHOICES	N	%
Never	68	21.05
Rarely	108	33.44
Sometimes	72	22.29
Frequently	59	18.27
Always	16	4.95
TOTAL	323	100

Here, in question 16, the most popular choice is again the second which indicates that 33.44 % of the respondents claim they can RARELY divide a sentence into smaller fragments to facilitate the comprehension process. Whereas 22.29 % of them say, they can do it SOMETIMES. In this question, like two other preceding questions a relatively high percentage of the respondents (21.05 %) have admitted that they could NEVER divide a sentence into meaningful units. This result seems to be remarkable because, recognition of the componenents of a sentence is of great value when reading for comprehension.

Question 17."I can identify the reference words and their functions in a reading passage."

Table 17.

CHOICES	N	%
Never	29	8.87
Rarely	72	22.02
Sometimes	89	27.22
Frequently	113	34.56
Always	24	7.34
TOTAL	327	100

The findings in this particular question are quite promising since 34.56 % of the respondent students say they are FREQUENTLY able to identify reference words and the functions as well. The second highest choice, SOMETIMES, is the third one with 27.22 %. The two highest choices indicate that majority of the respondents are capable of identifying reference words either sometimes or frequently in reading passage.

On the other hand, 22.02 % of them claim they are RARELY successful in this skill, whereas a small minority of the students think they can either NEVER or ALWAYS be successful when this skill is required.

Question 18. " I can identify sentence and paragraph connectors such as but, however, on the other hand, in a reading passage."

Table 18.

CHOICES	N	%
Never	24	7.32
Rarely	58	17.68
Sometimes	88	26.83
Frequently	119	36.28
Always	39	11.89
TOTAL	328	100

The findings reveal that a relatively high proportion of the respondents, 36.28 %, are FREQUENTLY able to identify sentence and paragraph connectors.The second largest group, 26.83 %, believe that they can do SOMETIMES do this. And only a minority of 7.32 % of the total respondents are NEVER able to do this in a reading comprehension passage.

Question 19." In a reading text I can locate the topic sentence."

Table 19.

CHOICES	N	%
Never	17	5.17
Rarely	50	15.20
Sometimes	72	21.88
Frequently	152	46.20
Always	38	11.55
TOTAL	329	100

As for the analysis of the answers given to the 19th question,a substantial percentage of the respondents said they were FREQUENTLY able to locate the topic sentence in a reading comprehension passage, and this is indicated by the fact that 46.20 % of them preferred the choice frequently. The preferences of the second larger group have demonstrated that a significantly larger group of the students, 21.88 %, responded,believe they can SOMETIMES find the topic sentence. Only 5.17 % of the respondents said they could NEVER do this.

Question 20. " I can locate the main idea in a reading passage. "

Table 20.

CHOICES	N	%
Never	13	3.89
Rarely	76	22.75
Sometimes	100	29.94
Frequently	125	37.43
Always	20	5.99
TOTAL	334	100

As for the analysis of the answers given to the 19th question,a substantial percentage of the respondents said they were FREQUENTLY able to locate the topic sentence in a reading comprehension passage, and this is indicated by the fact that 46.20 % of them preferred the choice frequently. The preferences of the second larger group have demonstrated that a significantly larger group of the students, 21.88 %, responded,believe they can SOMETIMES find the topic sentence. Only 5.17 % of the respondents said they could NEVER do this.

Question 21. " I can find out the major supporting sentences in the paragraphs."

Table 21.

CHOICES	N	%
Never	17	5.26
Rarely	83	25.70
Sometimes	107	33.13
Frequently	103	31.89
Always	13	4.02
TOTAL	303	100

As for the Freshman students' ability, to what extent they could identify the major supporting sentences, the results illustrated that a substantial proportion of the students, 33.13 %,said they could do this SOMETIMES, while 25.70 % of them claimed they were RARELY successful in carrying out this procedure. A higher percentage of the respondents,31.89%, manifested that they could FREQUENTLY find out major supporting sentences. Again, as usual, the lowest credit was given to either extreme choices, NEVER as 5.26 %, and ALWAYS, as 4.02 %.In sum the results indicate that the majority of the respondents can be considered successful in identifiying the major supporting sentences.

Question 22. " I can find out minor supporting sentences in a paragraph."

Table 22.

CHOICES	N	%
Never	26	8.15
Rarely	88	27.59
Sometimes	107	33.54
Frequently	85	26.65
Always	13	4.08
TOTAL	319	100

In identifying the minor supporting sentences, majority of the respondents, 33.54 %, said they were SOMETIMES succesful, wheres the ones who claimed they could find out the minor supporting sentences, RARELY, 27.59 %, and FREQUENTLY, 26.65 %, were the second and the third largest groups. The minorities again voted ALWAYS, 4.08 %, and 8.15 % NEVER, respectively.

Question 23. " When reading I can take notes, by simplifiying the complex expressions to a degree that facilitates my comprehension."

Table 23.

CHOICES	N	%
Never	44	13.88
Rarely	117	36.91
Sometimes	60	18.93
Frequently	78	24.61
Always	18	5.68
TOTAL	317	100

The fact revealed by this question is that a significantly large group of students, 36.91 %, claimed they were RARELY able to simplify expressions in a text for note-taking purposes. On the other hand, the minority who considered themselves ALWAYS successful in performing this skill,constituted only 5.68 %. Yet, a remarkable percentage of the respondents, 13.88 %, said they could never do this. Answers distributed between the two other choices, SOMETIMES and GENERALLY, are also indication of the fact that Freshman students are not competent enough in simplifying a text for the purpose of note-taking.

Question 24. " After note-taking, I can reorganize notes into a text of my own."

Table 24.

CHOICES	N	%
Never	60	19.42
Rarely	118	38.19
Sometimes	59	19.09
Frequently	53	17.15
Always	19	6.15
TOTAL	309	100

In this question it is clearly seen from the percentages that the majority of the students, responded, said they were SOMETIMES able to reorganize their notes into a paragraph or text of their own. This is evidenced by the 38.19 % of the respondents preferring the choice SOMETIMES. It has been demonstrated by this question that almost two out of ten, said they were never able to do this while, the choice which indicates the perfect level of performance recieved the lowest attention with 6.15 %. Since note-taking and decoding notes are considered essential for Freshman students, the results do not portray a hopeful situation concerning the skill presented in this particular question.

Question 25." Critical reading passages are given to us."

Table 25.

CHOICES	N	%
Never	65	20.57
Rarely	123	38.92
Sometimes	60	18.99
Frequently	62	19.62
Always	6	1.90
TOTAL	316	100

The answers to this question clearly show that the frequency of circumstances requiring critical reading seems very low since, a relatively large group of respondents said they RARELY needed to read a passage critically, this is also evidenced by the 38.92 % of answers corresponding to this choice (RARELY). In the second place comes the 1st choice, NEVER which also supports the fact that they do not encounter critical reading passages. However, 19.62 % of the students, responded, claimed they were FREQUENTLY required to read a text critically.

Question 26."I can make inferences based on the facts and opinions presented in a reading passage."

Table 26.

CHOICES	N	%
Never	31	9.75
Rarely	98	30.32
Sometimes	94	29.56
Frequently	82	25.79
Always	13	4.09
TOTAL	318	100

A relatively large proportion of students, approximately four out of ten, considered themselves RARELY successful in drawing inferences from a reading passage. On the other hand, the percentage of Freshman students who said they were SOMETIMES successful constituted the 29.56% of all the respondents, while a minority of 9.75 % replied as NEVER.

Question 27. " I will be in need of reading comprehension skill(s) more than the other language skills during my university education."

Table 27.

CHOICES	N	%
Never	20	6.51
Rarely	47	15.31
Sometimes	72	23.45
Frequently	98	31.92
Always	70	22.80
TOTAL	307	100

Answers to the 27th question reveal the importance attributed to reading comprehension skill by the Freshman students. According to the results, 31.92 % of the respondents seemed to have appreciated the value of reading comprehension skill throughout their engineering education. Furthermore, a relatively high percentage of the respondents, approximately three out of ten, considered reading skill ALWAYS important than the other skills. However, 6.51 % of the respondents said they had NEVER cosidered reading skill more impotant than the other skills.

The results of this particular question indicated that in English 101-102 courses, the reading skill should be emphasized according to the target needs of the Freshman students, because the students themselves are ready to undergo such an intense instruction.

Question 28." I can not read examination questions and reading comprehension passages at a reasonable speed and this hinders my general success."

Table 28.

CHOICES	N	%
Never	39	12.46
Rarely	88	28.12
Sometimes	59	18.85
Frequently	74	23.64
Always	53	16.93
TOTAL	313	100

It is apparent from the answers that a relatively significant proportion of the students, 28.12 %, questionned said they RARELY had difficulty in reading at a reasonable speed. However a minority of the students, 16.93 %, claimed they always failed in speed reading. On the other hand, 23.64 % of them said FREQUENTLY they were not successful in reaching up the desired reading speed. Therefore, these findins suggest that more attention should be directed to speed reading in the programme.

Quesation 29." To improve my reading comprehension and proficiency level, I am reading sources other than English 101-102 text books, because weekly teaching hours are not sufficient for these courses."

Table 29.

CHOICES	N	%
Never	75	23.51
Rarely	71	22.66
Sometimes	54	16.93
Frequently	70	21.94
Always	49	15.36
TOTAL	319	100

The results of this question reveal the fact that only a small group of the Freshman students, 15.36 %, said they ALWAYS read extra materials, for improving their reading comprehension and proficiency level. Whereas, by far the largest proportion of them, 23.51 %, said they NEVER tended to do this. Those who said they RARELY read extra materials constituted 22.66 %, of the total subjects.

Question 30." Text books, covered in preparatory school contributed to my success when dealing with reading comprehension passages in the Freshman programme."

Table 30.

CHOICES	N	%
Never	54	17.48
Rarely	86	27.83
Sometimes	68	22.01
Frequently	72	23.30
Always	29	9.39
TOTAL	309	100

The distribution of responses in this question is quite similar to that of the previous ones, in the respect that only a minority of 9.39 % of the respondents think preparatory school programmes ALWAYS contributed to their success in reading comprehension and in contrast, a significant proportion of them, almost two out of ten, said they had NEVER benefitted from the preparatory programme, in Freshman English 101-102 courses.

The highest percentage falls on the choice RARELY with 27.83 %, again suggesting that Preparatory programme is far from serving as the infrastructure of the 101-102 courses in Freshman for reading comprehension.

Question 31. "Reading comprehension skill that I gained in the Preparatory School and in the Freshman, is also helpful in other classes."

Table 31.

CHOICES	N	%
Never	48	15.34
Rarely	74	23.64
Sometimes	69	22.04
Frequently	77	24.60
Always	45	14.38
TOTAL	313	100

According to the answers accumulated for this question, the number of the students who think they benefit from reading conmprehemsion skill in other course, comprises the largest group. However, the number of students who think their reading skill is RARELY and SOMETIMES helpful comes in the second and third places, the former being 23.64 %, and the latter 22.04 %.

These findings propose that a great majority of the students think, reading comprehension skill gained both in Freshman and Preparatory School would also be helpful in their own majors.

Question 32. " Reading comprehension components of the English 101-102 courses are consistent with each other."

Table 32.

CHOICES	N	%
Never	68	21.19
Rarely	84	27.10
Sometimes	78	25.16
Frequently	59	19.03
Always	21	6.77
TOTAL	310	100

According to the data gathered for this question, most of the students think, reading comprehension components of the English 101-102 courses are RARELY consistent with each other, and those who think they are SOMETIMES consistent comprises the 25.16 % of the total respondents. Whereas, a significant number of them, 21.94%, believe these text books are NEVER consistent with each other.

As in most of the questions that we have discussed so far, the respondents' preferences were almost evenly distributed among the choices RARELY, SOMETIMES and FREQUENTLY whereas the two extreme choices NEVER and ALWAYS remained in the minority. This an indication of lack of consensus on most of the points among the students.

Queation 33. " Reading comprehenaion activitiea, covered in English 101-102 courses are done efficiently."

Table 33.

CHOICE	N	%
Never	97	31.19
Rarely	107	34.41
Sometimes	55	17.68
Frequently	46	14.79
Always	6	1.93
TOTAL	311	100

These findings apparently suggest that there is a serious evidence for the view that English 101-102 reading comprehension activities are not carried out effectively. Because a relatively high proportion of the respondents, 34.41 %, said RARELY , moreover the second largest group preferred NEVER (31.19 %). Because the choices RARELY and NEVER indicate a very low level of performance, the results of this question require close attention.

Question 34. " Besides English 101-102 text books, some extra supplementary materials are done in the classroom."

Table 34.

CHOICES	N	%
Never	172	54.26
Rarely	66	20.82
Sometimes	53	16.72
Frequently	21	6.62
Always	5	1.58
TOTAL	317	100

The answers clearly indicate that supplementary materials are not covered in Freshman English classes. This is confirmed by the 54.26 % of the respondents who said NEVER and 20.82 % who said RARELY as a response to this question. The choices with higher frequencies represented the inclanation of the majority.

Question 35." I enjoy reading comprehension passages and activities covered in English 101 course ."

Table 35.

CHOICES	N	%
Never	84	26.80
Rarely	94	29.65
Sometimes	61	19.24
Frequently	64	20.19
Always	14	4.42
TOTAL	317	100

In this question, respondents' choices illustrate that majority of them do not enjoy reading comprehension activities in English 101 text book, while only a minority ,4.12 %, claimed they enjoyed doing these activities.

Question 36. " I enjoy reading comprehension passages and activitites covered in English 102 course. "

Table 36.

CHOICES	N	%
Never	108	34.50
Rarely	99	31.63
Sometimes	53	16.93
Frequently	43	13.74
Always	10	3.19
TOTAL	313	100

At first glance it can be seen that a larger proprtion of the respondents said they did not enjoy doing reading activities in English 102 text book(s) this may lead us to a conclusion that reading comprehension components of the mentioned text books do not meet the students' expectations and do not satisfy their needs, this fact was supported by the fact that 34.50 % of them said they NEVER enjoyed these activities, while, again, only a minority of them said they ALWAYS enjoyed.

Question 37." The techniques employed in reading comprehension activities are encouraging."

Table 37.

CHOICES	N	%
Never	111	36.39
Rarely	101	33.11
Sometimes	51	16.72
Frequently	36	11.80
Always	6	1.97
TOTAL	305	100

In this particular question most of the preferences fall on the choice NEVER and thus revealing that a large proportion of the students believe reading comprehension techniques, employed in the classroom are not encouraging their active participation. And RARELY comes in the second place on which 33.11 % of the preferences fall, thus the choices NEVER and RARELY represent the opinions of a majority of over 70 %. This is an indication of the freshman students' negative attitude with respect to in-class reading comprehension techniques.

Question 38. " I have difficulty in understanding reading comprehension passages in English 101 text books because, they are beyond our general level of proficiency."

Table 38.

CHOICES	N	%
Never	93	35.09
Rarely	86	32.45
Sometimes	50	18.87
Frequently	26	9.81
Always	10	3.77
TOTAL	265	100

As for the difficulty of reading passages in English 101 text books, only a small minority of the respondents consider them ALWAYS difficult. Whereas the majority, 35.09 % and 32.45 %, think the passages are NEVER or RARELY beyond their general English level.

Question 39. 'I have difficulty in understanding reading passages in English 102 text book, because they are beyond our general level of English."

Table 39.

CHOICES	N	%
Never	67	24.63
Rarely	96	35.29
Sometimes	54	19.85
Frequently	34	12.50
Always	21	7.72
TOTAL	272	100

These findings suggest that, again, majority of the respondent students consider reading passages ,in English 102 text book,not beyond their level of perception, this is also supported by the fact that 35.29 % and 24.63 % of them replied as NEVER and RARELY,respectively.

Question 40. " In upper classes an elective reading comprehension course should be offered as a complement to 101-102 courses."

Table 40.

CHOICES	N	%
Never	37	14.45
Rarely	36	14.06
Sometimes	36	14.06
Frequently	67	26.17
Always	80	31.25
TOTAL	256	100

The results indicate the students' desire and need to take an elective reading comprehension course in upper classes, since a larger proportion of them said either FREQUENTLY and ALWAYS, such a course would contribute to their education process at the Faculty of Engineering.

4.2 Analysis of the Instructors' Questionnaire Results

This section of the chapter is mainly devoted to the analysis and discussion of the instructors' questionnaire results. As mentioned in the previous chapter, the questionnaires administered to the instructor groups were identical. Therefore, the data gathered from the two different groups (i.e., Engineering and Freshman instructors) will be presented in tables. This way, we will be comparing the opinions of Freshman instructors and Engineering instructors on the issues being questionned. Since the close-ended questions will be tabulated, the open-ended questions will be discussed at the end of the section under a separate subtitle.(4.2.3)

4.2.1 Analysis of the Close-Ended Questions

Question 2. " In general are you satisfied with the reading comprehension performance of your students ? "

TABLE 41.

CHOICES	Engineering Instructors		Freshman Instructors		TOTAL	
	N	%	N	%	N	%
YES	1	6.25	2	22.2	3	12
NO	15	93.75	7	77.8	22	88
TOTAL	16	100	9	100	25	100

df= 1 P= 0.05 X2c= 1.391 < X2t= 3.841 (-)

In this question, instructors' opinions were asked about whether they were satisfied with the reading comprehension performance of their students or not. According to the results, majority of both instructor groups have agreed on that they were not satisfied with the Freshman students' level of reading performance. This is also indicated by the fact that 93.75 % of the Engineering instructors and 77.78 % of the Freshman instructors questioned, said "No" to this question. In each group, a minority of 6.25% and of 22.22 %, said "Yes" respectively.

After the application of chi square test it has been observed that there is no stastistically significant relationship between the opinions of the two groups, since the calculated value of the "t" was found lower than its critical table value, when p= 0.05.

Question 4. " Do your students generally have difficulty in understanding examination questions and providing concise answers to the essay type questions ? "

TABLE 42.

CHOICES	Engineering Instructors		Freshman Instructors		TOTAL	
	N	%	N	%	N	%
YES	15	93.75	8	88.9	23	92
NO	1	6.25	1	11.1	2	8
TOTAL	16	100	9	100	25	100

df= 1 P= 0.05 X2c= 0.443 < X2t= 3.841 (-)

As for the instructors' opinions on whether the students have any difficulty in understanding examination questions and giving concise answer, by far the largest proportion of them, 93.75 %, and 88.90 %, said "Yes" to this question. A minority from each group (6.25 % and 11.10 % 0 favoured "No", indicating that their students did not have any difficulty in the above given situation.

Chi square test results did not indicate any statistically significant relationship between the preference tendencies of the two groups questionned, because the calculated X2 value is found lower than the table value, when p= 0.05.

Question 6. " Have you ever examined the text books and other materials covered by Engineering students/ or by Freshman students in English 101-102 courses ? "

TABLE 43.

CHOICES	Engineering Instructors		Freshman Instructors		TOTAL	
	N	%	N	%	N	%
YES	6	37.5	4	44.44	10	40
NO	10	62.5	5	55.56	15	60
TOTAL	16	100	9	100	25	100

df= 1 P= 0.05 X2c= 0.013 < X2t= 3.841 (-)

As can be seen from table 43, of those instructors who responded this question, the majority said they have not examined the course materials and text books other than those they actually teach. Findings also exemplify the situation, since 62.50 % of the Engineering instructors and 55.56 % of the Freshman instructors said "No" to this question.

Chi square result did not turn out to be significant, because the calculated X2 value was found lower than the critical value of it at an acceptable probability level (p= .05).

Question 7. " Do you think the weekly teaching hours for English 101-102 courses (4 hours) are enough at a faculty where English is the medium of instruction ? "

TABLE 44.

CHOICES	Engineering Instructors		Freshman Instructors		TOTAL	
	N	%	N	%	N	%
YES	9	56.25	-	-	9	36
NO	7	43.75	9	100	16	64
TOTAL	16	100	9	100	25	100

df= 1 p= 0.05 X2c= 2.126 < X2t= 3.841 (-)

According to the results, 100 % of the Freshman instructors who responded, agreed that the weekly teaching hours were not sufficient and Engineering instructors with 56.25 %, showed close agreement on the same point. However, 43.75 % of the latter said they found the program satisfactory with respect to teaching hours.

Application of chi square test to the obtained data in this particular question, did not indicate any statistically significant relationship.

Question 8. " Do you think that students should take an elective reading comprehension course in upper classes ?"

TABLE 45.

CHOICES	Engineering Instructors		Freshman Instructors		TOTAL	
	N	%	N	%	N	%
YES	11	68.75	9	100	20	80
NO	5	31.25	-	-	5	20
TOTAL	16	100	9	100	25	100

df= 1 P= 0.05 X2c= 2.006 < X2t= 3.341 (-)

The analysis of the answers to this question, clearly show that both Freshman and Engineering instructors think, a special reading course should be offered to the students in upper classes. This is also supported by the fact that, 68.75 % of the Engineering instructors said "Yes" to the same question. Only 31.25 % of the former said "No".

The application of chi square tests to the findings did not reveal a statistically significant relationship.

Question 9. " Would you propose that a committee should be formed to provide a flow of information between the Freshman section and the other academic departments ?"

TABLE 46.

CHOICES	Engineering Instructors		Freshman Instructors		TOTAL	
	N	%	N	%	N	%
YES	15	93.75	9	100	24	96
NO	1	6.25	-	-	1	4
TOTAL	16	100	9	100	25	100

df= 1 P= 0.05 X2c= 0.260 < X2t= 3.841 (-)

After the analysis of the answers to this question, it became obvious that both instructor groups, by far the largest proportion, have agreed on the idea of having a committee that would serve to bridge the information gap between Freshman and the other academic departments. The percentages that fall on each choice also emphasize this fact since, 100 % of the Freshman instructors voted in favour of such a committee and 93.75 % of the Engineering specialists recommended the same thing.

On the other hand, chi square test was applied to the findings of this question and no statistically significant relationship was found between the answers of the both groups involved in the study.

4.2.2 Analysis of the Close-Ended Ranking Questions

Question 1./ Identification of language skills in the first order of importance.

TABLE 47.

Language Skills	Engineering Instructors		Freshman Instructors		TOTAL	
	N	%	N	%	N	%
Reading	9	56.25	9	100	18	72
Writing	2	12.50	0	-	2	8
Listening	4	25.00	0	-	4	16
Speaking	1	6.25	0	-	1	4
TOTAL	16	100	9	100	25	100

df= 3 P= 0.05 X2c= 5.469 < X2t= 7.815 (-)

As for the identification of the importance of the four language skills (listening, reading, speaking, writing), the majority of the Engineering instructors, 56.25 %, who responded to this question considered reading to be the most important skill by putting it first. And listening, writing and speaking were considered to be the most important skills by 25 %, 12.50 %, and 6.25 % of the Engineering specialist, respectively.

On the other hand, all of the Freshman instructors gave the first order of importance to reading skill without any exception. However, chi square tests did not prove any statisatically significant relationship for this particular question.

Question 1./ Identification of language skills in the second order of importance.

TABLE 48.

Language Skills	Engineering Instructors		Freshman Instructors		TOTAL	
	N	%	N	%	N	%
Reading	2	12.5	0	-	2	8
Writing	5	31.25	5	55.5	10	40
Listening	8	50.00	4	45.5	12	48
Speaking	1	6.25	0	-	1	4
TOTAL	16	100	9	100	25	100

df= 3 P= 0.05 X2c= 2.575 < X2t= 7.815 (-)

As shown in this table, half the Engineering instructors, 50 %, considered listening to be the second important skill and writing was put second by a significant number of the same group of instructors, 31.25 %, it is also noteworthy that only a small group, 12.50 %, said reading should come in the second place with respect to its importance, while a minority of them, 6.25 %, considered speaking to be the second important skill among the others. As for the Freshman instructors' responses to the same ranking question, writing was considered to be the second important skill by over half of the respondents, 55.50 %, while 45.50 % of the same group said listening should come in the second order.

Question 1./ Identification of language skills in the order of third importance.

TABLE 49.

Language Skills	Engineering Instructors		Freshman Instructors		TOTAL	
	N	%	N	%	N	%
Reading	2	12.5	0	-	2	8
Writing	8	50.00	3	33.3	11	44
Listening	3	18.75	4	44.4	7	28
Speaking	3	18.75	2	22.3	5	20
TOTAL	16	100	9	100	25	100

df= 3 P= 0.05 X2c= 2.881 < X2t= 7.815 (-)

This table shows the frequency distribution of choices that considered each language skill to be placed third, in order of importance. Half of the Engineering specialists, 50 %, regarded writing a skill in the order of third importance. Two other groups of equal percentage, each 18.75 %, found listening to be equally important in the same place. Only 12.5 % of them chose reading to be important in the same order.

Question 1./ Identification of the language skills in the order of fourth importance

TABLE 50.

Language Skills	Engineering Instructors		Freshman Instructors		TOTAL	
	N	%	N	%	N	%
Reading	3	18.75	0	-	3	12
Writing	1	6.25	1	11.10	2	8
Listening	1	6.25	1	11.10	2	8
Speaking	11	68.75	7	77.80	18	72
TOTAL	16	100	9	100	25	100

df= 3 P= 0.05 X2c= 2.093 < X2t= 7.815 (-)

In this table, answers of the both groups of instructors are tabulated to illustrate the frequency distribution of the answers to the four language skills that were considered to be the least important (i.e.,in the fourth order). By far the largest proportion of the Engineering specialists, 68.75 %, and the Freshman instructors, 77.8 %, have chosen speaking as the least important skill, whereas a minority of the former, 18.75 % ,said reading was the least important of all. As for the writing and listening skills, both groups agreed on a closely similar ranking pattern that considered these two as the least important skills. The evidence for this comes from the similar frequency distribution of the answers in this respect.

Question 3./ Identification of the procedures causing the failure of reading comprehension, to be important in the first place.

TABLE 51.

Procedures	Engineering Instructors N	%	Freshman Instructors N	%	TOTAL N	%
Skimming	3	21.42	4	57.16	7	33.34
Scanning	7	50.00	1	14.28	8	38.10
Distinguishing facts from op.	2	14.29	1	14.28	3	14.28
Guessing meaning from context	2	14.29	1	14.28	3	14.28
Summarizing	0	-	0	-	0	-
TOTAL	14	100	7	100	21	100

df= 4 P= 0,05 X2c= 3.348 < X2t= 9.488 (-)

In question three, both instructor groups were asked to identify the procedures that they considered to be the hindering agents in reading comprehension. 14 out of 16 engineering instructors and 7 out of 9 Freshman instructors replied this question because, 2 from each group said they were satisfied with the students' reading comprehension performance, in the previous question (see appendix A-1 and A-2)). The answers to this question revealed that each instructor group has considered a different item (in the question) to be the main problem causing difficulty. For example, scanning was scored with the highest rate of failure by the engineering

instructors, 50 %. Yet Freshman instructors found skimming to be the procedure that the students had much difficulty with (57.16 %). On the other hand, with respect to the level of diufficulty, skimming was put as the number one problematic procedure by the 21.42 % of the Engineering instructors. Answers given on the students' failure of distinguishing facts from opinions, guessing meaning from the contex, and summarizing, showed a very close agreement in terms of ranking patterns of the groups involved.

Question 3./ Identification of the procedures causing the failure of reading comprehension, to be important in the second place.

TABLE 52.

Procedures	Engineering Instructors		Freshman Instructors		TOTAL	
	N	%	N	%	N	%
Skimming	2	14.28	0	-	2	9.53
Scanning	7	50.00	2	28.57	9	42.86
Distinguishing facts from opn.	3	21.42	0	-	3	14.28
Guessing meaning from opinions	2	14.29	4	57.15	6	28.57
Summarizing	0	-	1	14.28	1	4.76
TOTAL	14	100	7	100	21	100

df= 4 P= 0.05 X2c= 8.000 < X2t= 9.488 (-)

In identifying the importance of the above-given reading procedures, that the instructors thought they hindered the students' reading success in the second order, half of the Engineering specialists, 50 %, scored scanning with the second highest failure rate, while over half of the Freshman instructors, 57.15 %, put 'guessing meaning from the context, in the same place. However, distinguishing facts from opinions, quessing meaning from the context, and skimming were ranked to be the second important procedures by 21.43 %, 14.29 %, and 14.29 % of the Engineering instructors respectively. Yet, no credit was given to the summarizing in this respect.

Freshman instructors' views showed a different

ranking pattern by considering scanning, 28.57 %, and summarizing, 14.28 %, to be the second important procedures causing students' failure in reading comprehension. But skimming did not recieve any credits in this ranking pattern. (i.e., skimming was not considered of any importance in this respect)

Question 3./ Identification of the procedures causing the failure of reading comprehension to be important in the third place.

TABLE 53.

Procedures	Engineering Instructors N	%	Freshman Instructors N	%	TOTAL N	%
Skimming	5	35.71	1	14.28	6	28.58
Scanning	0	-	1	14.28	1	4.77
Distinguishing facts from opn.	1	7.14	1	14.28	2	9.52
Guessing meaning from context	5	35.71	2	28.58	7	33.33
Summarizing	3	21.44	2	28.58	5	23.80
TOTAL	14	100	7	100	21	100

df= 4 P= 0.05 X2c= 3.171 < X2t= 9.488 (-)

The figures in this table clearly show us, once again, the difference in the preferences between the two groups of instructors. The evidence for this comes from the fact that while 35.71 % of the Engineering specialists said 'guessing meaning from the context' is the third most important agent causing students' failure in reading comprehension, 28.58 %, of the Freshman instructors gave the same place to this item, according to Engineering specialists, another third important reading procedure considered to be important factor causing failure was skimming since, 35.71 % of them said so. In the third

order , the least important factor has been 'distinguishing facts from opinions', according to the Engineering specialists.

Freshman instructors, on the other hand, ranked the reading procedures that gave rise to failure of the students, as guessing meaning from context, distinguishing facts from opinions, scanning and skimming, as 28.58 %, 14.28 %, 14.28 % and 14.28 % respectively.

Question 3./ Identification of the procedures, causing the failure of reading comprehension to be important in the fourth place.

TABLE 54.

Procedures	Engineering Instructors N	%	Freshman Instructors N	%	TOTAL N	%
Skimming	1	7.15	1	14.28	2	9.52
Scanning	0	-	2	28.58	2	9.52
Distinguishing facts from opn.	5	35.74	3	42.86	8	38.10
Guessing meaning from context	2	14.28	0	-	2	9.52
Summarizing	6	42.85	1	14.28	7	33.34
TOTAL	14	100	7	100	21	100

df= 4 P= 0.05 X2c= 6.455 < X2t= 9.488 (-)

In this question results indicate that over four out of ten, Engineering specialists, 42.85 %, considered summarizing to be important in the fourth place leading students to failure in reading comprehension. But only a minority of the Freshman instructors has considered this to be the item important in the fourth place. In contrast, a significant proportion of the Freshman instructors, 42.86 %, said 'distinguishing facts from opinions' should come in the fourth place, being the cause of students' failure in reading comprehension. Similarly, Engineering specialists, 35.72 %, said this item should come in the fourth place of importance, to be the cause of the students' failure in reading comprehension.

Question 3./ Identification of the procedures causing the failure of reading comprehension in the fifth place.

TABLE 55.

Procedures	Engineering Instructors		Freshman Instructors		TOTAL	
	N	%	N	%	N	%
Skimming	3	21.42	1	14.28	4	19.05
Scanning	0	-	1	14.28	1	4.76
Distinguishing facts from opn.	3	21.42	2	28.57	5	23.81
Guessing meaning from context	3	21.42	0	-	3	14.28
Summarizing	5	35.71	3	42.87	8	38.10
TOTAL	14	100	7	100	21	100

df= 4 P= 0.05 X2c= 3.788 < X2t= 9.488 (-)

In identifying the least important reading procedures that were related to the Freshman students' reading failure in general, both groups of the instructors showed a close agreement that, summarizing has been the least important item, which had an effect on students' failure, in terms of reading comprehension. This is also supported by the fact that 35.74 % of the Engineering specialists, scored this item in the fifth place, similarly 42.87 % of the Freshman instructors said the same thing. Items such as skimming, distinguishing facts from opinions, and guessing meaning from context were said to have almost no effect on students' failure in reading, by 21.42 %, 21.42 % of the Engineering specialists respectively.

Question 5./ Identification of grammar and sentence structure, lack of reading comprehension strategies, vocabulary and failure to understand the subject matter, to be the reason for reading comprehension failure in the first place.

TABLE 56.

CHOICES	Engineering Instructors		Freshman Instructors		TOTAL	
	N	%	N	%	N	%
Grammar & sentence structure	4	25	6	66.70	10	40
Lack of reading strategies	2	12.50	3	33.30	5	20
Vocabulary	7	43.75	0	-	7	28
Failure to understand the subject matter	3	18.75	0	-	3	12
TOTAL	16	100	9	100	25	100

df= 3 P= 0.05 X2c= 9.375 > X2t= 7.815 (+)

This table shows the frequency distribution of the answers gathered on the identification of the items given in question 5, that both of the instructors groups have regarded to be the main problem for students' reading comprehension.

These findings reveal that while a significant proportion of the Engineering specialists, 43.75 % , has regarded vocabulary to be the main problem (in the first place), majority of the Freshman instructors, 66.70 %, on the other hand, has considered grammar and sentence

structure to be the main problem in the first place.

As for the ranking of other items in the first place, 25 %, 18.75 %, and 12.5 % of the Engineering instructors found grammar, sentence structure, failure in understanding the subject matter, and lack of reading comprehension strategies to be the main problem, respectively. However, only 33.30 % of the Freshman instructors regarded lack of reading comprehension strategies as the main problem in the first place, in contrast to 66.70 % who said grammar and sentence structure could be the main problem coming in the first place. Statistically significant relationship was found between the answers of the groups, since X2c > X2t.

Question 5./ Identification items to be important in the second place.

TABLE 57.

	Engineering Instructors		Freshman Instructors		TOTAL	
	N	%	N	%	N	%
Grammar & sentence structure	5	31.25	1	11	6	24
Lack of reading strategies	4	25	3	3	7	28
Vocabulary	4	25	4	45	8	32
Failure to understand the subject matter	3	18.75	1	11	4	16
TOTAL	16	100	9	100	25	100

df= 3 P= 0.05 X2c= 2.007 < X2t= 7.815 (-)

Table 57, presents the findings concerning the both instructor groups' answers with respect to ranking Freshman students' problem areas regarded important in the second place.

As can be understood from the table a substantial proportion of the Engineering specialists, 31.25 %, has chosen 'grammar and sentence structure' as the second important problem causing difficulties in reading comprehension, whereas Freshman instructors, over four out of ten, 44.5 % have regarded 'vocabulary' to be the problem in the second place. As for the ranking of other items, 'lack of reading strategies', 25 %, and 'failure to understand the subject matter', 18.75 %, were considered

to be of secondary importance by the former, and ' lack of reading comprehension strategies', 33.33 %, 'grammar and sentence structure' 11.11 %, and 'failure to understand the subject matter, 11.11 %, were chosen in the same place by the latter.

Question 5./ Identification of the items considered to be important in the third place.

TABLE 58.

CHOICES	Engineering Instructors		Freshman Instructors		TOTAL	
	N	%	N	%	N	%
Grammar & sentence structure	4	25	3	33.33	7	28
Lack of reading strategies	8	50	2	22.23	10	40
Vocabulary	1	6.25	3	33.33	4	16
Failure to understand the subject matter	3	18.75	1	11.11	4	16
TOTAL	16	100	9	100	25	100

df= 3 P= 0.05 X2c= 4.105 < X2t= 7.815 (-)

As for the answers in identifying the items given in question 5, in the third place of importance, the data obtained was as follows; although there seems to be a close agreemant on some of the items between the groups involved, there is also a strong disagreement especially on item 'b' which stands for 'lack of reading comprehension strateies'.Half of the Engineering instructors said 'lack of reading comprehension strategies ' could be the main problem in the third place, while, on the other hand, only 22.3 % of the Freshman instructors have seen the same item to be the main problem responsible for the students' reading difficulties, in the third place. 'Grammar,' failure to understand the subject matter', and and vocabulary were seen important in the

third place, by 25 %, 18.75 %, and 6.25 %, of the Engineering specialists respectively. Whereas, the Freshman instructors proposed the same ranking as grammar and sentence structure, vocabulary and failure to understand the subject matter 33.4 %, 33.4 %, and 11.1 %, respectively.

Question 5./ Identification of the items considered to be important in the fourth place.

TABLE 59.

	Engineering Instructors		Freshman Instructors		TOTAL	
	N	%	N	%	N	%
Grammar & sentence structure	2	12.5	0	-	2	8
Lack of reading strategies	2	12.5	0	-	2	8
Vocabulary	4	25	1	11.2	5	20
Failure to understand the subject matter	8	50	8	88.8	16	64
TOTAL	16	100	9	100	25	100

df= 3 P= 0.05 X2c= 4.167 < X2t= 7.815 (-)

Table 59, illustrates a strong agreement of both groups, this is especially emphasized by the identical scoring for the item 'd' which stands for ' failure to understand the subject matter. This agreement clearly shows that both groups have considered students' failure to understand the subject matter as the least important problem for a better reading performance. The evidence for this comes from the fact that a great majority of the Freshman instructors, 88.8 %, said among the other problems this came at the end, in a similar way 50 % of the Engineering instructors shared the same idea.

4.3 Analysis of the Open-Ended Questions

As stated in previuos chapter question 5, of the instructors questionnaire had one open-ended choice which required respondents' views on additional points to be considered problem for the students' reading comprehension.

One from each instructor group gave answer to this option, and surprisingly they both agreed on the importance of motivation when reading.

The other open-ended question was inserted into the questionnaire to give the respondents opportunity to express their opinions about what they thought to be important for the research study in question. Answers given to this open-ended question revealed that Freshman and Engineering instructors should work in collaboration with one another in identifying the target reading needs and selecting related materials to their field of study. Some of the instructors said they considered writing and producing accepable spoken English also important, while some proposed that a reading writing course should be offered to the Freshman students in an integrated fashion with the reading skill.

CHAPTER V

DISCUSSION OF THE RESULTS AND CONCLUSIONS

5.0 Presentation

In this final chapter, the results obtained from the evaluation of the questionnaires, administered to the subjects, will be compared with the hypotheses formulated at the beginning of the investigation, to see whether these hypotheses were supported or not. In addition, some recommendations will be made, since the study may contribute to the efforts of the curriculum designers and materials writers of the English 101 and 102 courses.

5.1 Discussion of the Results

In order to identify the reading comprehension needs of the Freshman English 101 and 102 students at the University of Gaziantep, a number of hypotheses were tested in this study, and the following results were obtained at the end.

1. When the three choices, NEVER, RARELY, and SOMETIMES are considered together, it can be inferred that

majority of the Freshman students do not consider reading comprehension necessary when dealing with their text books and other printed materials. On the other hand, majority of them think that they need reading comprehension skill when reading examination questions. Thus, the related hypothesis (1st) was supported

2. Results have indicated that the largest proportion of the Freshman students did not have difficulty in locating general message, the topic sentence, and the specific information in a reading passage. As a result the 2nd hypothesis was not supported.

3. Findings concerning the students' ability to read comprehensively revealed that the students, in majority, are not capable of carrying out this procedure after reading technical or scientific materials. Therefore, the 3rd hypothesis was supported.

4. As for the ability to distinguish facts from opinions, a large proportion of the respondent students said they were successful, whereas most of them believed they were not successful in taking short, concise notes and guessing meaning from the context. Although one of the assumptions(concerning distinguishing facts from opinions) has been disproved the 4th hypothesis was verified.

5. Findings have shown that majority of the Freshman students consider themselves to be successful in paragraph and sentence analysis, however, most of them find word analysis difficult when reading for comprehension.Although one of the assumptions was

verified, as a whole the 5th hypothesis was not supported.

6. Answers concerning the identification of the reference words in a reading comprehension passage have indicated that, a large proportion of the Freshman students think that they are capable of identifying the reference words and their functions. According to the obtained results, the 6th hypothesis was disproved.

7. A high proportion of the respondent Freshman students said they were capable of identifying sentence and paragraph connectors in a reading comprehension passage.As a result, the 7th hypothesis was not supported.

8. Since, over half of the students has stated that they are not able to paraphrase what they read, the related hypothesis (8th) was supported.

9. As for the ability to deduce conclusions from a reading passage, most of the students considered themselves to be successful. Therefore, the 9th hypothesis was not supported.

10. Findings have shown that a great majority of the students believe that reading is of greater importance when compared with other language skills during their university education. Thus, the 10th hypothesis was not supported.

11. According to the answers, a great majority of the students appear to be successful in identifying major and minor supporting sentences in any kind of paragraph organization. As a result,the related hypothesis ,11th,

was not supported.

12. Distribution of the percentages has clearly shown that the Freshman students are not required to read critically. As a result, the hypothesis ,12th, was verified.

13. The hypothesis ,13th, was supported, since most of the respondents do not consider reading speed to be an effective factor in their general success.

14. Over half of the students has agreed with the idea that, they are not exposed to sufficient reading practice due to limited weekly teaching hours. As a result the 14th hypothesis was supported.

15. A higher proportion of the freshman students has admitted that the reading comprehension skill gained either in the Preparatory School or in Freshman 101-102 courses, would be of great help in other courses also. The results verified the hypothesis (15th).

16. Majority of the respondents has agreed on the idea that the reading passages in English 101-102 text books do not appeal to their interest. This hypothesis (16th) was also verified.

17. The largest proportion of the respondents believe that techniques and methods employed in the reading comprehension sessions of the English 101-102 courses are not effective.So, the 17th hypothesis was verified.

18. A great majority of the Freshman students has pointed out that they never had any chance to cover

supplementary reading materials in the classroom. Thus the related hypothesis (18th) was verified.

19. Over half of the respondents believe that the reading comprehension passages covered in English 101-102 text books are difficult to handle and irrelevant to their major courses. These findings support the 19th hypothesis.

20. By far the largest proportion of the Freshman students think that the reading comprehension passages in English 101-102 text books are inconsistent with each other. The findings support the 20th hypothesis.

21. The idea of offering an elective reading comprehension course in upper classes has been supported by majority of the respondents verifying the related hypothesis (21st).

22. As for the instructors' views on the most important language skills, almost all of them in both groups, considered the reading to be the most important skill. However, the related hypothesis was supported since the Chi square test results turned out to be negative.

23. As stated in the 23rd hypothesis, different instructor groups considered lack of a different reading comprehension strategy to be the main reason for the Freshman students' failure in reading. But this tendency was not proved by any statistically significant relationship. So, the 23rd hypothesis was not supported.

24. As stated in the 24th hypothesis, instructor groups have strongly agreed on that their students have

difficulty in understanding examination questions and providing acceptable answers. However, chi square tests did not prove any statistically significant relationship between the preference tendencies of the groups, thus the hypothesis was supported.

25. Each instructor group has considered a different item (such as grammar, sentence structure, lack of reading comprehension strategies, failure to understand the subject matter and vocabulary) to be effective in giving rise to reading comprehension failure among the Freshman students. The positive outcome of the Chi square test provided support for the 25th hypothesis.

26. Over half of the Engineering and all of the Freshman instructors has stated that the weekly teaching hours allocated for English 101-102 courses are quite insufficient. Since no statistical significance was found concerning the agreement, the hypothesis was discredited.

27. Both of the instructor groups and the students have shown strong agreement on the necessity of an elective reading cpomprehension course in upper classes.But no statistical significance was found between the answers of the groups involved. Thus, the related hypothesis (27th) was supported.

28. Findings have clearly shown that a great majority of the instructors in both groups, do not have any idea about what is covered in classes other than those they currently teach. This is quite consistent with the hypothesis (28th). However no statistical significance was

found for this particular question and the hypothesis was discredited.

29. The instructor groups involved in the investigation have strongly agreed on the idea of having a coordination committee between academic departments to serve the purpose of suggesting solutions for the common problems. The hypothesis was not verified, because chi square tests did not indicate any statistical significance.

5.2 Conclusions

First of all, the investigation may well serve to the aims of course planners and materials writers, in formulating course objectives for English 101-102 courses. Although the investigation has justified most of our predictions about the students'reading comprehension neeeds, a further experimental study may be conducted to complement this study. In this way, the Freshman students' real capabilities can be discovered in terms of reading comprehension needs.

One of the most significant outcomes of the investigation may be the agreement of all the subjects on regarding reading to be the most important language skill throughout their education. In a similar way, Kahraman (1983 b:156) found that reading was considered one of the most essential skills by instructors of all classes. Another agreement was observed that both Freshman and

Engineering Instructors strongly recommend a coordination committee, to provide flow of information between the departments on academic issues. Yet another significant finding has been the insufficiency of the weekly teaching hours allocated for Freshman English 101-102 courses. However, instructors do know not much about the courses and the text books covered in classes other than those they actually teach. This outcome strongly indicates the lack of communication between the departments and emphasizes the need for a coordination committee once again. It is also noteworthy that the two instructor groups, involved in the study, have held diverse views concerning the reasons leading the Freshman students to failure in reading.

On the other hand, all the subjects involved in the study have stated that Freshman students face difficulty in understanding written exam questions, and the need for an elective reading comprehension course in upper classes has also been voiced by all the subjects.

The investigation have revealed that the Freshman students need to be trained in reading comprehension skills in such a way that they could benefit from them throughout their university education, and after graduation as well. It also became obvious that much more time is needed for reading comprehension practice in the classroom in order to handle intensive and extensive reading activities.

Findings also illustrated that the students

appeared to be devoid of knowledge and practice in critical reading, note taking, speed reading and guessing meaning from the context. Among them, note-taking is of great value and is an integral part of the listening skill which requires heavy training from the early days of the learning process. Furthermore, guessing meaning from the context is another skill which seems to be hindering their success in reading therefore, it requires much more emphasis, through practice.

Based on the findings, it can be concluded that the students, in most cases, do not take an active part in the reading comprehension sessions, just because they do not find the passages and the ways they are presented interesting.

5.3 Recommendations

In order to obtain much more benefit from English 101-102 courses and improve the quality of the reading comprehension activities, the followings could be recommended:

1. An academic coordination committee should be formed to provide flow of information between the Engineering departments and the Freshman section.

2. Freshman English courses should be based on the identified needs of the learners in reading skill area like the other language skills.

3. A special reading and writing course should be offered as an elective in upper classes.

4. Supplementary materials and extra exercises should be provided for English 101-102 text books to enable the Freshman students to do more practice. These materials should be prepared by the Freshman instructors in advance, taking the course objectives into account.

5. Freshman students should be given special instruction in order to improve their note taking and summarizing abilities by letting them watch video recordings on scientific and technological issues. The students' achievement should be checked through intensive information extracting type of exercises and examinations.

6. Students should be given extensive reading assignments and some questions should be inserted into the examinations from these reading activities.

7. In accordance with the schema-theoretic views, (mentioned in the 2nd chapter) reading comprehension components of the English 101-102 courses should involve teaching of a set of reading passages whose contents and written organizations were determined in advance according to the objectives of the courses and the students' field-specific interests. So, the students' background knowledge could be activated when dealing with reading passages, during the exams, parallel to the previously seen content and written organizations.

8. Reading comprehension questions of the regular examinations should be designed in such a way that

each student could select the most appropriate reading passage to his/her background knowledge from a group of reading passages.

9. The ability of the students' guessing meaning from contex should be reinforced through written and oral exercises and speed reading should be incorporated into the syllabus.

10. To stress the importance of reading skill, a 'reading center' should be established on the campus and special reading training should be offered there. And every year speed reading contest should be organized.

11. In order to achieve the above-mentioned goals more time should be allocated for English 101-102 courses.

REFERENCES

Adams, A, Carnine D.,Gersten, R.1982."Instructional strategies for studying content area texts in the intermediate grades." reading Research Quarterly, Vol.18.

Adams, Marilyn J., and Allan Collins.1979. A schema-theoric view of reading. In new directions in discourse processing, Roy o. Freedle (Ed.),1-22.Norwood,New Jersey: Ablex Publishing Corporation.

Alderman, G.H.1923."The effect of certain kinds of drill exercises on comprehension."Bulletin of the Extension Division,Indiana University,Vol.3.

Anderson, R.C., & Pearson, P.D.1984."A schema theoretic view of basic processes in reading comprehension. In P.D. (Ed.), Handbook of reading Research p.252-295.New York: Longman (ERIC Document Reproduction Service, No.ED, 239 236).

Anderson, Richard C., Ralph E. Reynolds, Diane L. Schallert and Ernest T. Goetz 1977. Frameworks for comprehending course American Educational Research Journal 14:4 .

Austin,R.1982. "The study guide: An invaluable tool for content study and reading improvement." Western College

Reading Association Journal.Vol.2.

Ausubel,D.1960." The use of advance organizers in the learning and retention of meaningful verbal material." journal of Educational Research Vol.51.

Baker,L.,and Brown,A.L.,1984. Metacognitive skills and reading. In P.D. Pearson (Ed.),Hand-book of reading research.New York:Longman.

Barnett, M.A. 1988. Teaching reading strategies: How methodology affects language course articulation. Foreign Language Annals,vol: 21 No.2 pp.150-62.

Barnett, M.A.1989 a. More than meets the eye. Foreign language reading : theory and practice.Center for Applied Lingiustics and by Prentice-Hall Inc.New Jersey.

Barnett, M.A.1989 b. More than meets the eye.Foreign language reading : theory and practice.Center for Applied Lingiustics and by Prentice-Hall Inc.New Jersey.

Barnett, M.A.1989 c. More than meets the eye.Foreign language reading : theory and practice.Center for Applied Lingiustics and by Prentice-Hall Inc.New Jersey.

Bartlett, Frederic C.1932. Remembering: a study in experimental, and social psychology. Cambridge; Cambridge University Press.

Bean, T.W., and Steenwyk, F.L.1984. " The effect of three forms of summarization instruction on sixth graders' summary writing and comprehension." Journal of reading Behaviour.Vol.16.

Beauchamp,W.L.1923. " A preliminary experimental study of technique in the mastery of subject matter in elementary physical science." studies in secondary education I, Supplementary Educational Monograph No.24. Chicago, IL:Department of Education, University of Chicago.

Bennett. A.L. 1953. "An experiment in reading." Michgan Educational Journal. Also reported as" Two experimental groups in reading. College English, 1954.

Bernhardth, E.B.1986."Reading in the foreign language."In B. H.Wing (Ed.), Listening, reading, and writing Analysis and Application. Middlebury V.T: Notrtheast Conference.

Block,E. 1986. The comprehension strategies of second language readers.TESOL Quarterly Vol.20, No.3 pp.463-94

Boodt,G.M.1984."Critical listeners become critical readers in remedial reading class." The Reading Teacher.Vol.37.

Brooks, L.W., and Dansereau, D.F. 1983. " Effects of structural schema training and text organization on expository prose processing." Journal of Educational Psychology,Vol.75.

Campione,Joseph C.,and Armbruster,1985. Acquiring information from texts:An analysis of four approaches," in Judith W.Segal, Susan F.Chipman, and Robert Glaser,eds., Thinking and learning skills Vol.1. Hillsdale, NJ: Erlbaum, 1985.

Carrell, P.L., & Eisterhold, J.C. 1983. Schema Theory and

ESL reading pedagogy. TESOL Quarterly Vol: 17 No: 4.

Carrell L. Patricia, and Eisterhold C. Joan, 1983 ; "Schema Theory and ESL Reading Pedagogy."TESOL Quarterly Vol.17, No.4 December 1983 pp.553-554.

Carrell,P.I.1985." Facilitating ESL reading by teaching text structure." TESOL Quarterly, Vol.19.

Carver,R.1977 Toward a theory of reading comprehension and rauding. Reading Research Quarterly,13, 8-64.

Casanave, C.P.1988 Comprehension monitoring in ESL reading: a neglected essential.TESOL Quarterly Vol.22.

Chamot, Anna Uhl & Kupper,L., 1989. Learning strategies in foreign language instruction. Foreign Language Annals-February 1989.pp.14-18.

Cline, M., Jr. 1965. A-V aids for Spanish-speaking pupils. In J.A. Figurel (Ed.), Reading and inquiry.Newark,DE: International Reading Association.

Coady,J.(1979). A psycholinguistic model of the ESL reader.In R. Mackay, B.Barkman, & R.R. Jordan (Eds.), Reading in asecond language: Hypotheses,organization, and practice. Rowley,MA: Newbury House.5-12.

Cohen, R.B., and Bradley, R.H.1977. " Teaching superordinate concepts with simulation games." Alberta Journal of Educational Research, Vol. 23.

Cunningham, J.W.1982." Generating interactions between schemata and text." In J.A.Niles L.A.Harris (Eds.),New inquires in reading research and

instruction. Thirty-First Yearbook of the National Reading Conference.Rochester Ny: National Reading Conference.

Davey, B., and Mc Bride, S.1986. "Effects of question generation training on reading comprehension.'Journal of Educational Psychology, Vol.78.

Davis, E. 1839. The teacher taught or the principles and modes of teaching.Boston, M.A: Marsh,Capen,Lyon & Webb.

Deal, R.W. 1934." the development of reading and study habits in college students. Journal of Educational Psychology, vol.25.

Dee-Lucas, K., and Di Vesta ,F.J. 1980. " Learner-generated organizational aids: effects on learning from text." Journal of Educational Psychology.Vol.72.

Dilworth, T. 1807. A new guide to the english tongue. Glasgow, Scotland: printed by Niven, Napier & Khull for A Wilson, and Gardner & Hutchinson.

Doctorow, M., Witrock, M.C.,& Marks, C.1978.Generative process in reading comprehension. Journal of Educational Psychology,Vol.70.

Eisenhart, W.W.1920. " Remedial measures in reading." Seventh Annual Schoolmaster's Week Proceedings. Philadelphia,P.A: University of Pennsylvania.

Eskey, D.E. 1976. "Toward a theory of second language reading." Paper presented at the Conference on Second Language Learning and Teaching.

Eskey , D.E.1988, "Toward a theory of second language

reading." paper presented at the conference on Second Language Learning and Teaching, Oswego,NY.(ERIC Document Reproduction Service, No.ED.132845).

Eskey, D. E. 1988. Holding in the bottom: An interactive approach to the language problems of second language readers.In P.L. Carell,J.Devine, D.E. Eskey (Eds.), Interactive approaches to second language reading Cambridge: Cambridge University Press.

Gatto, F.M. 1934." Remedial reading in Pitssburgh high schools.Pitssburgh Schools Vol.9.

Gay, L.R., Educational Research, Competencies and Application 1981a. Bell and Howell Company. Columbus, Ohio.

Gay, L.R., Educational Research, Competencies and Application 1981b. Bell and Howell Company. Columbus, Ohio.

Germane, C.E.1921. "Outlining and summarizing compared with reading as methods of studying." in G.M. Whipple (Ed.),silent reading.Twentieth Yearbook of the National Society for the study of Education, Part 2. Bloomington, IL: Public School Publishing.

Gersten, R., and Carnine, D. 1986. Direct instruction in reading comprehension. Educational Leadership, vol: 43.

Geva, E. 1983. Facilitating reading comprehension through flowcharting. Reading Research Quarterly. Vol: 18.

Glover, J.A., Zimmer, N.W., Ronning, R.R., and Petersen,C. H.1980."Nobody knows how to remember that prose."

Journal of Educational Research Vol.73.

Goodman, K.S.(Ed).1986 The psycholinguistic nature of the reading process.Detroit Wayne State University Press.

Good, C.V.1926." The effect of single reading versus two readings of a given body of material." Journal of Educational Method, Vol.5.

Good, C.V.1927. " The effect of extensive and intensive reading on the reproduction of ideas or thought units.Journal of Educational Psychology.Vol.18.

Gough,P.B. 1972.One second of reading.In J.F. Kavanagh & I.G.Mattingly (Eds.),Language by Ear and by Eye.p.331-358. Cambridge, MA: MIT Press 1972.

Gray, W.S.1917." The relation of silent reading to economy in education." In G.M. Whipple (Ed.), second report of the National Society for the Study of Education ,Part, I.Bloomington,IL: Public School Publishing.

Hafner,E.,and Palmer,B.C.1980. "The differential effects of three methods of teaching on the reading comprehension and vocabulary of ninth grade students." Journal of Educational Psychology.Vol.74.

Hill, W.R.1964." Influence of direction upon reading flexibility of advanced college readers." In E.L. Thurstone and L.E. Hafner.(Eds.)," New concepts in college adult reading." Thirteen Year-Book of the National Reading Conference. Milwaukee, WI: National Reading Conference.

Hoon. J.H.1921. Motivated drill work in third-grade silent

reading.In G.M.Whipple (Ed,), Report of the society's committee on silent reading.Twentieth Yearbook of Education Part 2.Bloomington, IL: Public School Publishing.

Hoover,J.H.1921.Motivated drill work in third-grade silent reading.In G.M. Whipple (Ed.),Report of the society's committee on silent reading. Twentieth Yearbook of the National Society for the Study of Educatio, Part 2. Bloomington, IL: Public School Publishing.

Hosenfeld, C.1977. A learning-teaching view of second-language instruction: the learning strategies of second-language learners with reading gramar tasks. Dissertation, Ohio State University.

Hosenfeld, C.1979. A preliminary investigation of the reading strategies of successful and nonsuccessful second language learners.System vol.5 No.2 pp.110-23.

Hosenfeld, C.1979.Cindy:A learner in today's foreign language classroom environment.pp.53-75.Middlebury,VT: Northeast Conference (ERIC Document Reproduction Service,No.ED 185 837.).

Hosenfeld,C.1984. Case studies of ninth grade readers. In J.C. Alderson & A.H. Urquhart (Eds.), Reading in a foreign language. New York:Longman.

Johnson Patricia., 1981 TESOL Quarterly Vol:15 No:2 p.161 181.

Just, M.A.,and Carpenter.P.A.1980. "A theory of reading: from eye fixations to comprehension." Psychological

Review. Vol.87.

Kahraman, Gulden. 1983a. A profile to Academic Engllish needs of Freshman Students of METU Gaziantep Campus, Ankara :ODTU Sosyal Bilimler Enstitutsu icin yapilan yayinlanmamis Yuksek Lisans Tezi.

Kahraman, Gulden.1983b. A profile to academic Engllish needs of Freshman Students of METU Gaziantep Campus, Ankara : ODTU Sosyal Bilimler Enstitutsu icin yapilan yayinlanmamis Yuksek Lisans Tezi.

Kahraman,Erol.1988. Determining minimum competency level of Freshman students of METU Gaziantep Campus, Ankara : ODTU Sosyal Bilimler Enstitusu icin yapilan yayinlanmamis Yuksek Lisans Tezi.

Karatas, Necmiye. 1983.Variables Involved in an ESP Course Designed for Prep.School Students at METU Gaziantep Campus. ODTU Sosyal Bilimler Enstitusu icin yapilan yayinlanmamis Yuksek Lisans Tezi.

Kennedy, D.K., and Weener, P.1973. Visual and auditory training with the cloze procedure to improve reading and listening comprehension." Reading Research Quarterly.Vol.8.

Kern, R.G.1988.The role of comprehension strategies in foreign language reading.Unpublished dissertation, University of California,Berkeley.

Kintsch,W., and van Dijk,T.1987."Toward a model of text comprehension and production." Psychological Review.Vol.85

LaBerge,D. and Samuels,S.J.1974." Toward a theory of automatic information processing in reading." Cognitive Psychology.Vol.6.

Lamoreaux, L.A., Farley, R., Herring, B., and Trott, F. 1934. "Remedial reading instruction in sixth grade groups." California Journal of Elementary Education.

Laffey, J.L, Kelly,D., and Perry, B.1980. "The effect of repeated reading of taped literature on reading achievement.'In M.L. Kamil and A.J.Moe (Eds.),Perspectives on reading research and instruction .Twenty-Ninth Yearbook of the National Reading Conference.Washington D.C.:National Reading Conference.

Lemons, R.L., and Moore, S.C. 1982." The effects of training in listening on the development of reading strategies." Reading Improvements. Vol: 19.

Mackay,Ronald 1979. Identifying the nature of the learner's needs English for Specific Purposes. London: Longman.

Manzo, A.V.1979. "imbedded aids to readers: Alternative to traditional textual." New England Reading Association Journal.Vol.19.

Mavrogenes,N.A., and Padak, N.D. 1982. the reading road to writing.Journal of Educational Research, Vol. 75.

McCullough, C.M. 1957. " What does research reveal about practices in teaching reading ?" English Journal, Vol: 46.

McDonald, A.S., and Pauk, W.J. 1956. Teaching college

freshman to read. Phi Delta Kappan, No: 38.

Mc. Neil,J., and Donant.L.1982."Summarization strategy for improving reading comprehension." In J.A.Niles and L.A.Harris (Eds.), New inquires in reading research and instruction.Thirty-First Yearbook of the National Reading Conference.

Meeks, J.W. 1979. " Imbedded aids to readers:" An alternative textbook approach. Reading Improvement, No:16.

Newlun, C.O. 1930. " Teaching childremn to summarize in fifth grade history." Contributions to Education, No: 4. Newyork Teachers College Columbia University.

Nie, Norman H. 1975. Statistical Package for the Social Sciences. New York Mc Graw-Hill Company Book Co.

Orlando, V.P.,and Hayward, K.G.1978." A comparison of the effectiveness of three study techniques for college students." In P.D. Pearson and J.Hansen (Eds.), Reading : Disciplined inquiry in process and practice.Twenty-Seventh Yearbook of the National Reading Conference.Clemson SC.

Ostler, Shirley E.1980. A survey of academic needs for advanced ESL students. TESOL Quarterly Vol.XVI Nr.4 Dec. P.489-490.

Pearson, P.D., and Tierney, R. 1984 On becoming a thoughtful reader: learning to read like a writer. In A. Purves and O. Niles(Eds.), Becoming a reader in a complex society.Chicago, IL: Chicago University Press.

Plaister,R.,1968.Reading instruction for college level foreign students.TESOL Quarterly Vol;2 No.3 p.164-68.

Parker, F.W. 1883. Talks on teaching. New york: Barnes.

Prosser, G.V.1978. "The role of relevant active questions in learning based upon succesive presentations." Instructional Science,Vol.3.

Rashotte,C.A., and Torgesen, J.K.1985 " Repeated readings and reading fluency in learning disabled children." Reading Research Quarterly, Vol.20.

Reed, E.E., 1968."Improving comprehension through study of of syntax and paragraph structure in sevevth grade English classes. In J.A. Figurel (Ed.), Forging ahead in reading.Newark, DE: International Reading Association.

Rehder, L.G.1980. " reading skills in a paperback classroom." Reading Horizons No.21.

Rhoades, L.C.1929." Systematic remedial training for pupils of superior reading ability." Elementary School Journal. Vol.29.

Rinehart,S.D., Stahl, SA., and Erickson,L.G. 1986." Some effects of summarization training on reading and studying." Reading Reasearch Quarterly, Vol. 21.

Rivers, W.1968 Teaching Foreign Language Skills (2nd Ed.,1981).Chicago: University of Chicago Press(ERIC Document Reproduction Service, No.ED 205 037).

Ritchie, P. 1985." The effects of instruction in main idea and question generation.'Reading Canada Lecture. Vol.3.

G. Cortese (Ed.),Reading in a foreign language pp.449-458. Milan: Franco Angeli.

Romanes, G.J.1884 Mental evolution in animals.New York: J. Appleton.

Robinet,B.W. 1980. " Reader and text in comprehension." In G. Cortese (Ed.), Reading in a Foreign Language. Milan, Franco Agneli.

Robinson, H.A. et al. 1990a. Reading comprehension instruction 1783-1987 a review of trends and research. In Fitzgerald J. (Ed.), International Reading Association Newark Delaware.

Robinson, H.A. et al. 1990b. Reading comprehension instruction 1783-1987 a review of trends and research. In Fitzgerald J. (Ed.), International Reading Association Newark Delaware.

Robinson, H.A. et al. 1990c. Reading comprehension instruction 1783-1987 a review of trends and research. In Fitzgerald J. (Ed.), International Reading Association Newark Delaware.

Rudolf, J.B. 1949. "The effect of reading instruction on achievement in eight grade." Social Studies Contributions in Education No.945 New York: Bureau of Publications, Teachers College, Columbia University.

Rumelhart, D.E.1977. Toward an interactive model of reading.In S Dornic (Ed.), Attention and Performance p. 573-603.Hillsdale, NJ: Lawrence Erlaum.

Rumelhart, David E.1980. Schemata: the building blocks of

of cognition. In Theoretical issues in reading comprehension, Rand J.Spiro, Bertram C.Bruce,and William E. Brewer (Eds.),33-58. Hillsdale, New Jersey:Lawrence Erlbaum Associates.

Rumelhart, D.E., Mc Clelland J.l.,& the PDP Research Group 1986. Parallel distributed processing: Explorations in the microstructure of cognition 2 Vols. Cambridge MA; MIT Press,

Salisbury, R.A. 1934." A study of the transfer effects of training in logical organizations." Journal of Educational Research.Vol. 38.

Sarig,G.(1987).High-level reading in the first and in the foreign language:Some comparative process data.In J.Devine,P.L. Carell, & D.E.Eskey(Eds.),Research in reading in English as a second language pp.107-120.Washington D.C: Teachers of English to Speakers of Other Languages.

Saville-Troike, M. 1979. Reading and the audio-lingual method. In Mackay, B. Barkman, & R.R Jordan (Eds.), Reading in a second language: Hypotheses, organization, and practice. Rowley, M.A: Newbury House.

Sayre, H.M. 1940. Teaching reading in the current events class. Journal of Educational Research, Vol: 33.

Seidman, G.M. 1984. "the effects of previewing and the structured overview on the comprehension of sixth grade children." Florida Reading Quarterly. Vol. 20.

Sinatra, R.C., Stahl-Gemake, J., and Berg D.N. 1984. "

Improving reading comprehension of disabled readers through semantic mapping." The Reading Teacher,Vol. 38.

Slater, W.H. 1985. "Teaching expository text structure with structural organizers."Journal of Reading Vol.28.

Slater, W.H., Graves, M.F., and Piche,G.L. 1985." effects of structural organizers on ninth-grade students' comprehension and recall of four patterns of expository text." Reading Research Quarterly, Vol.20.

Smith, F., 1982 Understanding reading (3rd Ed.).New York:Holt Rinehart and Winston.

Smith, F., 1972.Psycholinguistics and reading. Holt Rinehart and Winston Inc.1972.

Smith, N.B. 1986. American reading instructor. Newark, DE: International Reading Association.

Solits, J.M, and Pflaum, S.1979. "The effect of instruction in in connectives on reading comprehension. Reading World, No.19.

Speigel, D.L., and Fitzgerald,G. 1986."Improving reading comprehension through instruction about story parts." The Reading Teacher. Vol.39.

Springsteed, C.B. 1925. " improving speed and comprehension in reading.Journal of Educational Method Vol. 5.

Stahl, S. 1983. Differential word knowledge and reading comprehension. Journal of Reading Behaviour, 15.

Stone, C.W., and Colvin, C. 1920. " How to study as a source of motive in educational psychology.Journal of

Educational Psychology.Vol.11.

Stanovich, K.E.1980. Toward an interactive-compensatory model of individual differences in the development of reading fluency. Reading Research Quarterly Vol;16, p.32-71.

Taylor, B.M. and Beach, R.W.1984."The effects of text structure instruction on middle-grade students' comprehension and production of expository text." Reading Research Quarterly.Vol.19.

Tilemma, H. 1983. Webteaching: "sequencing of subject matter in relation to prior knowledge of pupils." Instructional Science, Vol.12.

Taylor, B.M.1982." Text structure and children's comprehension and memory for expository material." Journal of Educational Psychology,Vol.74.

Taylor, B.M.1986. Teaching middle-grade students to read for main ideas. In J.A. niles and R.V Lalik (Eds.),Solving Problems in literacy:Learner,teachers, and researchers.Thirty-Fifth Yearbook of the National Reading Conference.

To-Dutka, Julia 1991. Developing self-monitored comprehension strategies through argument structure analysis. Journal of Reading vol.35 No.3 1991 pp 200-205.International Reading Association Publication.

Vacca,R.T.1980."The study of holistic and subskill instructional approaches to reading comprehension."

Varnhagen, C.K.,and Goldman,S.R.1986."Improving

comprehension: Casual relations instruction for learning handicapped learners."The Reading Teacher,Vol. 39.

Vaughan, J.L., Castel, G., Gilbert, K., and Love, M.1982 Varied approaches to preteaching vocabulary. In J.A.Niles and L.A. Harris (Eds.), New inquiries in reading research and instruction. Thirty-First Yearbook of the National Reading Conference. Rochester, NY: National Reading Conference.

Wardhaugh, R. 1969. Reading: A linguistic perspective. New York: Harcourt, Brace & World.

White, C.V.,Pascarella,E.T.,and Pflaum,S.W. 1981."Effects of training in science construction on the comprehension of learning disabled children." Journal of Educational Psychology,Vol.73.

Williams, M., and Stevens, V.M.R. 1972. Understanding paragraph structure. Journal of Reading, Vol: 15.

Wixon, K.K. 1986. Vocabulary instruction and children's comprehension of basal stories. Reading Research Quarterly, vol: 21.

Yoakam, G.A., and Truby,C.1926." The effects of certain practice execises in reading.University of Pittsburgh School of Education Journal.No.1.

Yorio, C.A. 1971.Some sources of reading problems for foreign language learners.Language Learning, 21,107-15.

Zughoul Raji,M. and Hussein Riyad, F. 1986."English for higher education in the Arab world: A case study of needs analysis at Yarmouk University." The ESP journal.Vol.4

APPENDICES

APPENDIX A

Gaziantep Universitesi Muhendislik Fakultesi I.sinif ogrencilerinin Ingilizce okuma-anlama becerilerine iliskin ihtiyaclarinin belirlenmesine yonelik anket.

Degerli ogrenci,

Bu anket siz 'Freshman' ogrencilerinin okuma-anlama becerisini kazanirken karsilastiginiz zorluklari ve oncelikli ihtiyaclarinizin tespit edilmesi amaci ile hazirlanmistir. Bu anketten elde edilecek sonuclar yukarida sozu edilen amaclar dogrultusunda kullanilacaktir. Anket sorularina vereceginiz cevaplarin gerceklig, sizler icin daha verimli ve yararli calismalara yonelmemizi saglayacaktir.Bu nedenle sorulari cevaplarken en uygun buldugunuz secenegi isaretlemeniz gerekmektedir. Gostereceginiz ilgiye simdiden tesekkur ederim.

Mayis, 1991

M.Semih SUMMAK
Gaziantep Universitesi
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ANKET

Cevaplama Ornegi:

Universite ogrenimim sirasinda okuma-anlama becerisine ihtiyac duyuyorum.

A.) Hicbir zaman B.) Nadiren C.)Bazen D.)Sıklıkla E.) Her Zaman

Uygun secenegi daire icine alarak her soru icin bir tercih belirtiniz. TESEKKURLER.

1. Ingilizcede okuma-anlama becerisine,ders kitaplarimda karsilastigim parcalari okurken ihtiyac duyarim.

a) Hicbir zaman b) Nadiren c) Bazen d) sıklıkla e)Her zaman

2. Okuma-anlama becerisine muhendislik alanimla ilgili dergi, magazin, ve sureli yayinlar okurken ihtiyac duyarim

a) Hicbir zaman b) Nadiren c) Bazen d) sıklıkla e)Her zaman

3.Sinavlarimda (Eng.101-102 ve diger)sorulari cevaplarken, okuma-anlama becerisini kullanmam gerekiyor.

a) Hicbir zaman b) Nadiren c) Bazen d) sıklıkla e)Her zaman

4.Verilen bir parcayi, anlamak amaci ile okurken genel mesaji veya fikri kolaylikla cikarabiliyorum.

a) Hicbir zaman b) Nadiren c) Bazen d) sıklıkla e)Her zaman

5. Okudugum parcada bulunmasi istenen belrgin (specific) bir bilgiyi, yer,olay tarih gibi, bulabiliyorum.

a) Hicbir zaman b) Nadiren c) Bazen d) sıklıkla e)Her zaman

6.Teknik veya bilimsel icerikli bir parcayi okuduktan sonra, o parcayi kendi ifadelerimle anlatabilecek duzeyde kavrayabilirim.

a) Hicbir zaman b) Nadiren c) Bazen d) sıklıkla e)Her zaman

7.Elestirisel amacli okudugum parcalarda,gercekleri goruslerden ayirabiliyorum.

a) Hicbir zaman b) Nadiren c) Bazen d) sıklıkla e)Her zaman

8. okudugum parcalara iliskin,kisa ve ozlu notlar alabiliyorum.

a) Hicbir zaman b) Nadiren c) Bazen d) sıklıkla e)Her zaman

9.Bir okuma parcasinda karsilastigim yeni kelimelerin anlamlarini sozluk kullanarak bulurum.

a) Hicbir zaman b) Nadiren c) Bazen d) sıklıkla e)Her zaman

10. Okudugum parcayi cumle duzeyinde anlayabiliyorum.

a) Hicbir zaman b) Nadiren c) Bazen d) sıklıkla e)Her zaman

11. Anlamaya yonelik okudugum parcalardaki paragraflari analiz (anlamli kucuk parcalara ayirma) edebiliyorum.

a) Hicbir zaman b) Nadiren c) Bazen d) sıklıkla e)Her zaman

12.Okuma parcasini olusturan paragraflar arasinda anlam bakimindan iliski kurabiliyorum.

a) Hicbir zaman b) Nadiren c) Bazen d) sıklıkla e)Her zaman

13. Okuma parcalarindaki bilinmeyen kelimelerin anlamlarini, on ek,son ek gibi kisimlarina ayirarak cikarabiliyorum.

a) Hicbir zaman b) Nadiren c) Bazen d) sıklıkla e)Her zaman

14. Okuma parcalarindaki bilinmeyen kelimeleri parcanin genel icerigine bakarak anlayabiliyorum.

a) Hicbir zaman b) Nadiren c) Bazen d) sıklıkla e)Her zaman

15. Noktalama isaretlerini parcadaki bilinmeyem kelimelerin anlamlarini bulmak icin kullanabiliyorum.

a) Hicbir zaman b) Nadiren c) Bazen d) sıklıkla e)Her zaman

16. Cumleleri anlayabilmek icin, onlari meydana getiren ogelere ayirabiliyorum.

a) Hicbir zaman b) Nadiren c) Bazen d) sıklıkla e)Her zaman

17. Okuma parcalarinda,once bahsi edilen kisi veya nesnelerin daha sonraki satirlarda aynen tekrarini yapmamak icin kullanilan, kelimelerin (reference words) neler oldugunu ve neyin yerine kullanildiklarini anlayabiliyorum.

a) Hicbir zaman b) Nadiren c) Bazen d) sıklıkla e)Her

zaman

18.Cumleleri ve paragraflari birbirlerine baglayan kelimeleri (but, however, on the contrary, gibi.) anlayabiliyorum.

a) Hicbir zaman b) Nadiren c) Bazen d) sıklıkla e)Her zaman

19. Okuma parcalarindaki paragraflarin " topic sentence' lerini bualabiliyorum.

a) Hicbir zaman b) Nadiren c) Bazen d) sıklıkla e)Her zaman

20. Okuma parcasindaki paragraflarda 'main idea'lari bulabiliyorum.

a) Hicbir zaman b) Nadiren c) Bazen d) sıklıkla e)Her zaman

21.Okuma parcalarindaki paragraflarin "major supporting sentence'lerini bulabiliyorum.

a) Hicbir zaman b) Nadiren c) Bazen d) sıklıkla e)Her zaman

22. Paragraflardaki "minor supporting sentence"leri bulabiliyorum.

a) Hicbir zaman b) Nadiren c) Bazen d) sıklıkla e)Her zaman

23. Okudugum parcaya iliskin not tutarken ifadeleri sadelestirip anlayacagim basitlige indirgeyebiliyorum.

a) Hicbir zaman b) Nadiren c) Bazen d) sıklıkla e)Her zaman

24. Tuttugum notlari organize ederek kendi ifadelerimden

olusan bir bilgi butunu haline getirebiliyorum.

a) Hicbir zaman b) Nadiren c) Bazen d) sıklıkla e)Her zaman

25. Elestirisel yaklasimla okumam gereken parcalarla da karsilasiyorum.

a) Hicbir zaman b) Nadiren c) Bazen d) sıklıkla e)Her zaman

26.Okudugum parcadaki bilgilerden hareketle bir takim yargilara varip sonuc cikarabiliyorum.

a) Hicbir zaman b) Nadiren c) Bazen d) sıklıkla e)Her zaman

27.Universitede ogrenimimi surdururken, diger becerilere kiyasla, okuma-anlama becerisine daha fazla ihtiyac duyuyorum.

a) Hicbir zaman b) Nadiren c) Bazen d) sıklıkla e)Her zaman

28.Gerek sinav sorularini, gerekse okuma-anlama parcalarini belli bir hizla okuyamadigim icin genel basarim dusuyor.

a) Hicbir zaman b) Nadiren c) Bazen d) sıklıkla e)Her zaman

29. Freshman 101-102 haftalik ders saatlerinin az olmasi nedeni ile Ingulizce okuma-anlama becerimi ve genel seviyemi gelistirmek amaci ile ders kitaplari disindaki kaynaklari da okuma ihtiyaci hissediyorum.

a) Hicbir zaman b) Nadiren c) Bazen d) sıklıkla e)Her zaman

30. Ingilizce hazirlik programindaki kitaplar, 101-102 derslerindeki okuma-anlama becerisine iliskin calismalarimda basarili olmama etki etmistir.

a) Hicbir zaman b) Nadiren c) Bazen d) sıklıkla e)Her zaman

31. Gerek hazirlik sinifinda, gerekse 101-102 derslerinde kazandigim okuma-anlama becerisi diger butun bolum derslerim de de faydali oluyor.

a) Hicbir zaman b) Nadiren c) Bazen d) sıklıkla e)Her zaman

32.'English'101 ve 102 ders kitaplarimizdaki okuma-anlama icerikli bolumler birbirini tamamlamaktadir,

a) Hicbir zaman b) Nadiren c) Bazen d) sıklıkla e)Her zaman

33. Freshman English derslerinde okuma becerisine iliskin calismalar etkin bir sekilde yapiliyor.

a) Hicbir zaman b) Nadiren c) Bazen d) sıklıkla e)Her zaman

34.'Freshman English' derslerinde kitap disi okuma materyallerini sinifta isleyebiliyoruz.

a) Hicbir zaman b) Nadiren c) Bazen d) sıklıkla e)Her zaman

35. Eng.101 dersleri kapasamindaki okuma-anlama parcalarini ilgi cekici ve guncel buluyorum, bu sebeble severek okuyorum.

a) Hicbir zaman b) Nadiren c) Bazen d) sıklıkla e)Her zaman

36.'English 102' kapsamindaki okuma anlama parcalarini ilgi cekici ve guncel buluyorum bu sebeble severek okuyorum.

a) Hicbir zaman b) Nadiren c) Bazen d) sıklıkla e)Her zaman

37. 'English 101-102' derslerindeki okuma-anlama parcalarinin islenme teknigi beni derslere katilmaya tesvik ediyor.

a) Hicbir zaman b) Nadiren c) Bazen d) sıklıkla e)Her zaman

38.'English 101' dersi kapsamindaki okuma parcalarini genel Ingilizce seviyemizin ustunde olmasi nedeni ile anlamakta gucluk cekiyorum.

a) Hicbir zaman b) Nadiren c) Bazen d) sıklıkla e)Her zaman

39.'English 102' dersi kapsamindaki okuma parcalarini genel Ingilizce seviyemizin ustunde olmasi nedeni ile anlamakta gucluk cekiyorum.

a) Hicbir zaman b) Nadiren c) Bazen d) sıklıkla e)Her zaman

40. Ust siniflarda' English 101-102 ' dersleri paralelinde ve tamamen okuma-anlama becerisine agirlik veren secmeli bir dersin ogrenim surecinde cok yararli katkilari olacaktir.

a) Hicbir zaman b) Nadiren c) Bazen d) sıklıkla e)Her zaman

APPENDIX A1

Gaziantep Universitesinde 'Freshman'ogrencilerinin okuma-anlama becerilerine iliskin ihtiyaclarini belrilemeye yonelik Muhendislik Fakultesi ogretim elemamlarina verilen anket.

Degerli Meslektasim,

Elinizdeki anket, Gaziantep Universitesi Muhendislik Fakultesi I. sinif ogrencilerinin okuma-anlama becerilerine iliskin ihtiyaclarinin belirlenmesine yonelik olarak duzenlenmistir. Bu anketten elde edilecek sonuclar Yuksek Lisans calismamda kullanilacak verileri olusturacaktir, bu nedenle sorulari dilediginiz gibi cevaplandirabilirsiniz.

Isbirliginiz ve yardimlariniz icin simdiden tesekkur ederim.

Kasim, 1991

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ANKET

1. Asagidaki dil becerilerinden hangisini ogrencileriniz icin gerekli goruyorsunuz ? (tercihlerinizi 1'den 4'e kadar onem sirasina gore siralayiniz.1 en onemli 4 en az onemli olacak sekilde.)

( ) a. Reading (Okuma)

( ) b. Writing (Yazma)

( ) c. Listening (Dinleme)

( ) d. Speaking (Konusma)

2.Genel olarak ogrencilerinizin okuma-anlama duzeylerini yeterli buluyormusunuz.

( ) a. Evet ( ) b. Hayir

3.Eger cevabiniz HAYIR ise, ogrencileriniz asagidaki okuma-anlama stratejilerinden hangisinde basarisiz olmaktadirlar ? (tercihlerinizi 1-4 arasinda onem sirasina gore isaretleyiniz.)

( ) a. Skimming (ana fikri almak icin okuma)

( ) b. Scanning (spesifik bilgi edimek icin okuma

( ) c. Gercekleri goruslerden ayirma

( ) d. Bilinmeyen kelimelerin anlamlarini parcanin genel iceriginden cikarma

( ) e. Ozet cikarma

4. Ogrencileriniz genelde sinav sorularini anlamada zorlaniyorlar mi?

( ) a. Evet ( ) b. Hayir

5. Ders kitaplarini, sinav sorularini,ve diger yazili materyalleri okuyup anlayamayan ogrencilerin problemleri sizce asagidakilerden hangileri olabilir ? (onem sirasina gore 1-5 arasi rakamlar veriniz.)

( ) a.Gramer ve cumle yapisini bilmeme

( ) b.Okuma-anlama becerilerinin eksikligi

( ) c.Kelime bilgisi

( ) d.Konuyu anlamama

( ) e.Eger baska varsa belirtiniz.....

.....

6. Kendi okuttugunuz ders kitaplari disindaki," Freshman English 101-102" ders kitaplarini ve diger basili materyali incelediniz mi ?

( ) a. Evet ( ) b. Hayir

7. Freshman Ingilizcesi icin ayrilmis olan haftalik 4 saatlik zamanin Ingilizce ogretim yapan bir Universitede yeterli olacagina inaniyormusunuz ?

( ) a. Evet ( ) b. Hayir

8. Ust siniflarda ogrencilerin okuma-anlama adi altinda secmeli bir ders almalari yararli olur mu ?

( ) a. Evet ( ) b. Hayir

9.Freshman bolumu ile Muhendislik bolumleri arasinda bilgi akisini saglayacak bir kurul olusturulmasini onerirmisiniz ?

( ) a. Evet ( ) b. Hayir

10.Bu anketin amaclarina yonelik belirtmek istediginiz baska hususlar var ise belirtiniz .....

.....

APPENDIX A2

Gaziantep Universitesinde 'Freshman'ogrencilerinin okuma-anlama becerilerine iliskin ihtiyaclarini belirilemeye yonelik "Freshman 101-102 " dersi ogretim elemamlarina verilen anket.

Degerli Meslektasim,

Elinizdeki anket, Gaziantep Universitesi Muhendislik Fakultesi I. sinif ogrencilerinin okuma-anlama becerilerine iliskin ihtiyaclarinin belirlenmesine yonelik olarak duzenlenmistir.Bu anketten elde edilecek sonuclar Yuksek Lisans calismamda kullanilacak verileri olusturacaktir, bu nedenle sorulari dilediginiz gibi cevaplandirabilirsiniz.

Isbirliginiz ve yardimlariniz icin simdiden tesekkur ederim.

Kasim, 1991

M. Semih SUMMAK
Gaziantep Universitesi
Fen-Edebiyat Fakultesi
Yabanci Diller Bolumu.

ANKET

1. Asagidaki dil becerilerinden hangisini ogrencileriniz icin gerekli goruyorsunuz ? (tercihlerinizi 1'den 4'e kadar onem sirasina gore siralayiniz.1 en onemli 4 en az onemli olacak sekilde.)

( ) a. Reading (Okuma)

( ) b. Writing (Yazma)

( ) c. Listening (Dinleme)

( ) d. Speaking (Konusma)

2.Genel olarak ogrencilerinizin okuma-anlama duzeylerini yeterli buluyormusunuz.

( ) a. Evet ( ) b. Hayir

3.Eger cevabiniz HAYIR ise, ogrencileriniz asagidaki okuma-anlama stratejilerinden hangisinde basarisiz olmaktadirlar ? (tercihlerinizi 1-4 arasinda onem sirasina gore isaretleyiniz.)

( ) a. Skimming (ana fikri almak icin okuma)

( ) b. Scanning (spesifik bilgi edimek icin okuma

( ) c. Gercekleri goruslerden ayirma

( ) d. Bilinmeyen kelimelerin anlamlarini parcanin genel iceriginden cikarma

( ) e. Ozet cikarma

4. Ogrencileriniz genelde sinav sorularini anlamada zorlaniyorlar mi?

( ) a. Evet ( ) b. Hayir

5. Ders kitaplarini, sinav sorularini,ve diger yazili materyalleri okuyup anlayamayan ogrencilerin problemleri sizce asagidakilerden hangileri olabilir ? (onem sirasina gore 1-5 arasi rakamlar veriniz.)

( ) a.Gramer ve cumle yapisini bilmeme

( ) b.Okuma-anlama becerilerinin eksikligi

( ) c.Kelime bilgisi

( ) d.Konuyu anlamama

( ) e.Eger baska varsa belirtiniz.....

.....

6. Kendi okuttugunuz ders kitaplari disindaki, Muhendislik Fakultesi ders kitaplarini ve diger basili materyali incelediniz mi ?

( ) a. Evet ( ) b. Hayir

7. Freshman Ingilizcesi icin ayrilmis olan haftalik 4 saatlik zamanin Ingilizce ogretim yapan bir Universitede yeterli olacagina inaniyormusunuz ?

( ) a. Evet ( ) b. Hayir

8. Ust siniflarda ogrencilerin okuma-anlama adi altinda secmeli bir ders almalari yararli olur mu ?

( ) a. Evet ( ) b. Hayir

9.Freshman bolumu ile Muhendislik bolumleri arasinda bilgi akisini saglayacak bir kurul olusturulmasini onerirmisiniz ?

( ) a. Evet ( ) b. Hayir

10.Bu anketin amaclarina yonelik belirtmek istediginiz baska hususlar var ise belirtiniz .....

.....

APPENDIX B

TABLE 47.

OBSERVED DATA	EXPECTED DATA	(O-E)SQ	(O-E)SQ/E
9.00	11.52	6.35	0.55
2.00	1.28	0.52	0.41
4.00	2.56	2.07	0.81
1.00	0.64	0.13	0.20
9.00	6.48	6.35	0.98
0.00	0.72	0.52	0.72
0.00	1.44	2.07	1.44
0.00	0.36	0.13	0.36

5.469

TABLE 48

OBSERVED DATA	EXPECTED DATA	(O-E)SQ	(O-E)SQ/E
2.00	1.28	0.52	0.41
5.00	6.40	1.96	0.31
8.00	7.68	0.10	0.01
1.00	0.64	0.13	0.20
0.00	0.72	0.52	0.72
5.00	3.60	1.96	0.54
4.00	4.32	0.10	0.02
0.00	0.36	0.13	0.36

2.575

TABLE 49

OBSERVED DATA	EXPECTED DATA	(O-E)SQ	(O-E)SQ/E
2.00	1.28	0.52	0.41
8.00	7.04	0.92	0.13
3.00	4.48	2.19	0.49
3.00	3.20	0.04	0.01
0.00	0.72	0.52	0.72
3.00	3.96	0.92	0.23
4.00	2.52	2.19	0.87
2.00	1.80	0.04	0.02

2.881

TABLE 50

OBSERVED DATA	EXPECTED DATA	(O-E)SQ	(O-E)SQ/E
3.00	1.92	1.17	0.61
1.00	1.28	0.08	0.06
1.00	1.28	0.08	0.06
11.00	11.52	0.27	0.02
0.00	1.08	1.17	1.08
1.00	0.72	0.08	0.11
1.00	0.72	0.08	0.11
7.00	6.48	0.27	0.04

2.093

TABLE 51

OBSERVED DATA	EXPECTED DATA	(O-E)SQ	(O-E)SQ/E
3.00	4.67	2.78	0.60
7.00	5.33	2.78	0.52
2.00	2.00	0.00	0.00
2.00	2.00	0.00	0.00
4.00	2.33	2.78	1.19
1.00	2.67	2.78	1.04
1.00	1.00	0.00	0.00
1.00	1.00	0.00	0.00

3.348

TABLE 52

OBSERVED DATA	EXPECTED DATA	(O-E)SQ	(O-E)SQ/E
2.00	1.33	0.44	0.33
7.00	6.00	1.00	0.17
3.00	2.00	1.00	0.50
2.00	4.00	4.00	1.00
0.00	0.67	0.44	0.67
0.00	0.67	0.44	0.67
2.00	3.00	1.00	0.33
0.00	1.00	1.00	1.00
4.00	2.00	4.00	2.00
1.00	0.33	0.44	1.33

8.000

TABLE 53

OBSERVED DATA	EXPECTED DATA	(O-E)SQ	(O-E)SQ/E
5.00	4.00	1.00	0.25
0.00	0.67	0.44	0.67
1.00	1.33	0.11	0.08
5.00	4.67	0.11	0.02
3.00	3.33	0.11	0.03
1.00	2.00	1.00	0.50
1.00	0.33	0.44	1.33
1.00	0.67	0.11	0.17
2.00	2.33	0.11	0.05
2.00	1.67	0.11	0.07

3.171

TABLE 54

OBSERVED DATA	EXPECTED DATA	(O-E)SQ	(O-E)SQ/E
1.00	1.33	0.11	0.08
0.00	1.33	1.78	1.33
5.00	5.33	0.11	0.02
2.00	1.33	0.44	0.33
6.00	4.67	1.78	0.38
1.00	0.67	0.11	0.17
2.00	0.67	1.78	2.67
3.00	2.67	0.11	0.04
0.00	0.67	0.44	0.67
1.00	2.33	1.78	0.76

6.455

TABLE 55

OBSERVED DATA	EXPECTED DATA	(O-E)SQ	(O-E)SQ/E
3.00	2.67	0.11	0.04
0.00	0.67	0.44	0.67
3.00	3.33	0.11	0.03
3.00	2.00	1.00	0.50
5.00	5.33	0.11	0.02
1.00	1.33	0.11	0.08
1.00	0.33	0.44	1.33
2.00	1.67	0.11	0.07
0.00	1.00	1.00	1.00
3.00	2.67	0.11	0.04

3.788

TABLE 56

OBSERVED DATA	EXPECTED DATA	(O-E)SQ	(O-E)SQ/E
4.00	6.40	5.76	0.90
2.00	3.20	1.44	0.45
7.00	4.48	6.35	1.42
3.00	1.92	1.17	0.61
6.00	3.60	5.76	1.60
3.00	1.80	1.44	0.80
0.00	2.52	6.35	2.52
0.00	1.08	1.17	1.08

9.375

TABLE 57

OBSERVED DATA	EXPECTED DATA	(O-E)SQ	(O-E)SQ/E
5.00	3.84	1.35	0.35
4.00	4.48	0.23	0.05
4.00	5.12	1.25	0.24
3.00	2.56	0.19	0.08
1.00	2.16	1.35	0.62
3.00	2.52	0.23	0.09
4.00	2.88	1.25	0.44
1.00	1.44	0.19	0.13

2.007

TABLE 58

OBSERVED DATA	EXPECTED DATA	(O-E)SQ	(O-E)SQ/E
4.00	4.48	0.23	0.05
8.00	6.40	2.56	0.40
1.00	2.56	2.43	0.95
3.00	2.56	0.19	0.08
3.00	2.52	0.23	0.09
2.00	3.60	2.56	0.71
3.00	1.44	2.43	1.69
1.00	1.44	0.19	0.13

4.105

TABLE 59

OBSERVED DATA	EXPECTED DATA	(O-E)SQ	(O-E)SQ/E
2.00	1.28	0.52	0.41
2.00	1.28	0.52	0.41
4.00	3.20	0.64	0.20
8.00	10.24	5.02	0.49
0.00	0.72	0.52	0.72
0.00	0.72	0.52	0.72
1.00	1.80	0.64	0.36
8.00	5.76	5.02	0.87

4.167