An Experiment Comparing the Relative Effectiveness of a Linear and a Context Program in Teaching Some Selected Persian Words With Reference to the Persian Alphabet to English Speaking People

Batool Moghadam
Utah State University

Follow this and additional works at: https://digitalcommons.usu.edu/etd
Part of the Linguistics Commons, and the Psychology Commons

Recommended Citation

This Dissertation is brought to you for free and open access by the Graduate Studies at DigitalCommons@USU. It has been accepted for inclusion in All Graduate Theses and Dissertations by an authorized administrator of DigitalCommons@USU. For more information, please contact digitalcommons@usu.edu.
AN EXPERIMENT COMPARING THE RELATIVE EFFECTIVENESS OF A LINEAR AND A CONTEXT PROGRAM IN TEACHING SOME SELECTED PERSIAN WORDS WITH REFERENCE TO THE PERSIAN ALPHABET TO ENGLISH SPEAKING PEOPLE

by

Batool Moghadam

A dissertation submitted in partial fulfillment of the requirements for the degree of DOCTOR OF PHILOSOPHY in Psychology

Approved:

UTAH STATE UNIVERSITY
Logan, Utah

1973
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. INTRODUCTION</strong></td>
<td>1</td>
</tr>
<tr>
<td>The Problem</td>
<td>2</td>
</tr>
<tr>
<td><strong>II. REVIEW OF LITERATURE</strong></td>
<td>3</td>
</tr>
<tr>
<td>Programed Instruction</td>
<td>3</td>
</tr>
<tr>
<td>Studies in the Area of Programed Instruction</td>
<td>7</td>
</tr>
<tr>
<td>Related, Supportive Studies</td>
<td>10</td>
</tr>
<tr>
<td>Teaching Foreign Languages</td>
<td>14</td>
</tr>
<tr>
<td>Some Experiments in the Area of Foreign Language Instruction</td>
<td>16</td>
</tr>
<tr>
<td>Persian as a Foreign Language</td>
<td>18</td>
</tr>
<tr>
<td>Summary</td>
<td>23</td>
</tr>
<tr>
<td><strong>III. METHOD</strong></td>
<td>24</td>
</tr>
<tr>
<td>Purpose of the Study</td>
<td>24</td>
</tr>
<tr>
<td>Hypotheses</td>
<td>24</td>
</tr>
<tr>
<td>Procedure</td>
<td>25</td>
</tr>
<tr>
<td>Data and Instrumentation</td>
<td>26</td>
</tr>
<tr>
<td>Subjects</td>
<td>26</td>
</tr>
<tr>
<td>Time Calendar</td>
<td>26</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>27</td>
</tr>
<tr>
<td><strong>IV. RESULTS</strong></td>
<td>29</td>
</tr>
<tr>
<td>Variable 1--Persian in Context</td>
<td>29</td>
</tr>
<tr>
<td>Variable 2--Pronunciation</td>
<td>31</td>
</tr>
<tr>
<td>Variable 3--List Meaning</td>
<td>32</td>
</tr>
<tr>
<td>Variable 4--Total Posttest Score</td>
<td>33</td>
</tr>
<tr>
<td>Variable 5--Time on the First Part</td>
<td>35</td>
</tr>
<tr>
<td>Variable 6--Time on the Second Part</td>
<td>35</td>
</tr>
<tr>
<td>Variable 7--Time on the Third Part</td>
<td>37</td>
</tr>
<tr>
<td>Variable 8--Time on the Fourth Part</td>
<td>38</td>
</tr>
<tr>
<td>Variable 9--The Total Amount of Time</td>
<td>39</td>
</tr>
<tr>
<td>Males and Females</td>
<td>40</td>
</tr>
<tr>
<td>Summary</td>
<td>41</td>
</tr>
<tr>
<td><strong>V. DISCUSSION</strong></td>
<td>46</td>
</tr>
<tr>
<td>Programed Instruction</td>
<td>46</td>
</tr>
<tr>
<td>Programs in General</td>
<td>47</td>
</tr>
<tr>
<td>Linear Program</td>
<td>49</td>
</tr>
<tr>
<td>Context Program</td>
<td>50</td>
</tr>
<tr>
<td>Developing the Posttests</td>
<td>52</td>
</tr>
<tr>
<td>Subjects and Organization</td>
<td>52</td>
</tr>
<tr>
<td>Pilot Study</td>
<td>54</td>
</tr>
</tbody>
</table>
TABLE OF CONTENTS (Cont.)

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problems in Developing the Program</td>
<td>55</td>
</tr>
<tr>
<td>Limitation</td>
<td>57</td>
</tr>
<tr>
<td>Suggestions for Further Research and Application</td>
<td>58</td>
</tr>
<tr>
<td>VI. SUMMARY AND CONCLUSIONS</td>
<td>59</td>
</tr>
<tr>
<td>The Problem</td>
<td>59</td>
</tr>
<tr>
<td>The Review of Literature</td>
<td>59</td>
</tr>
<tr>
<td>Method</td>
<td>61</td>
</tr>
<tr>
<td>Conclusion</td>
<td>62</td>
</tr>
<tr>
<td>LITERATURE CITED</td>
<td>63</td>
</tr>
<tr>
<td>APPENDICES</td>
<td>68</td>
</tr>
<tr>
<td>Appendix A</td>
<td>70</td>
</tr>
<tr>
<td>Appendix B</td>
<td>110</td>
</tr>
<tr>
<td>Appendix C</td>
<td>127</td>
</tr>
<tr>
<td>Appendix D</td>
<td>145</td>
</tr>
<tr>
<td>VITA</td>
<td>148</td>
</tr>
<tr>
<td>Table</td>
<td>Description</td>
</tr>
<tr>
<td>-------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>1.</td>
<td>Mean Scores of Linear and Context Groups</td>
</tr>
<tr>
<td>2.</td>
<td>Analysis of Variance for Sex and Program</td>
</tr>
<tr>
<td>3.</td>
<td>Mean Scores on Pronunciation</td>
</tr>
<tr>
<td>4.</td>
<td>Analysis of Variance for Pronunciation Test</td>
</tr>
<tr>
<td>5.</td>
<td>Mean Scores on List Meaning</td>
</tr>
<tr>
<td>6.</td>
<td>Analysis of Variance for List Meaning Test</td>
</tr>
<tr>
<td>7.</td>
<td>Mean Scores on Total Posttest</td>
</tr>
<tr>
<td>8.</td>
<td>Analysis of Variance for Total Posttest</td>
</tr>
<tr>
<td>9.</td>
<td>Time on the First Part</td>
</tr>
<tr>
<td>10.</td>
<td>Analysis of Variance for Time on First Part</td>
</tr>
<tr>
<td>11.</td>
<td>Time on the Second Part</td>
</tr>
<tr>
<td>12.</td>
<td>Analysis of Variance for Time on the Second Part</td>
</tr>
<tr>
<td>13.</td>
<td>Time on the Third Part</td>
</tr>
<tr>
<td>14.</td>
<td>Analysis of Variance for Time on the Third Part</td>
</tr>
<tr>
<td>15.</td>
<td>Time on the Fourth Part</td>
</tr>
<tr>
<td>16.</td>
<td>Analysis of Variance for Time on the Fourth Part</td>
</tr>
<tr>
<td>17.</td>
<td>The Total Amount of Time</td>
</tr>
<tr>
<td>18.</td>
<td>Analysis of Variance for the Total Amount of Time</td>
</tr>
<tr>
<td>19.</td>
<td>Sex Differences on the Linear Program for Variables 1-9</td>
</tr>
<tr>
<td>20.</td>
<td>Sex Differences on the Context Program for Variables 1-9</td>
</tr>
<tr>
<td>21.</td>
<td>Context-Linear Effectiveness</td>
</tr>
<tr>
<td>22.</td>
<td>Amount of Time on Context and Linear Programs</td>
</tr>
</tbody>
</table>
**LIST OF FIGURES**

<table>
<thead>
<tr>
<th>Figure</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Schema for the Analysis</td>
<td>27</td>
</tr>
</tbody>
</table>
ABSTRACT

An Experiment Comparing the Relative Effectiveness of a Linear and a Context Program in Teaching Some Selected Persian Words With Reference to the Persian Alphabet to English Speaking People

by

Batool Moghadam, Doctor of Philosophy

Utah State University, 1973

Major Professors: Dr. David R. Stone and Dr. Ronald S. Peterson
Department: Psychology

The purpose of this study was to test the relative effectiveness of a linear and a context program in teaching some selected Persian words to English speaking people.

A survey of the literature did not reveal studies closely related to the present study, but it revealed studies verifying the usefulness of programed instruction in general, and also some limited attempts made to set up programs for teaching Persian to Americans. There has been increasing attention by educators to programed instruction in the last fifteen years. The idea was also supported that there is a need in the United States for the study of some foreign languages, including Persian.

Sixty subjects of both sexes were assigned randomly to either the linear or the context program. The programs included the same words, and they appeared in the same order in each program. The level of performance of students on three posttests given to them was the criteria...
for judgment of achievement. The amount of time each group spent on the program was the criteria for time comparison.

The principal finding was that there was a significant difference in favor of the context program at the $P < .05$ level in terms of time spent. Females in the linear program received significantly higher mean scores on list meaning and overall posttest scores at $P < .05$ level.
CHAPTER I
INTRODUCTION

Human beings need to understand and to be able to communicate with each other. To know a foreign language is one way of understanding people from foreign countries.

Nostrand (1967) stated that, at that time, the purpose of learning a foreign language for many people was to broaden their international experience, to further their education, to satisfy their curiosity about other peoples and nations, and to increase their ability to cooperate effectively with foreign people. Emiloo (1965) reported that, "The general aim of instruction in foreign language is to develop in pupils the skills needed for effective communication in the foreign language."

Foreign language study is needed more today than in the past because the world has functionally shrunk in size due to advanced technology. Thousands of Americans are travelling each year to foreign countries and electronic communication is rapid (Politzer, 1972).

Reading a foreign language is an important skill in helping to gain an understanding of people from other countries. According to Duncan (1961), many people study a foreign language to be able to read for pleasure as well as to be able to speak the language. The ability to read a foreign language is important in studying the literature, culture, history, and lives of famous people in foreign lands.

Smith (1963) indicated that in 1959 the American Council of Learned Societies, under contract with the United States Office of Education, established a list of languages that have been neglected in the United States, but could become of critical importance in the future. Of
first priority on this list were the following languages: Arabic, Chinese, Hindu, Urdu, Japanese, Portuguese, and Russian. Of second priority were eighteen other languages, among them Persian.

Interest in this area is shown in a number of books and articles which give information on teaching the Persian language to Americans. For instance, Neysari's (1954) dissertation reported a comparison of teaching Persian as the mother tongue and as a foreign tongue, and Marashi (1970) has studied the teaching of Persian verbs. However, no studies have been reported comparing the effectiveness of basic linear as compared to context programing in the teaching of some Persian words and letters to Americans.

The Problem

There is, then, a need in America for the study of certain languages, including Persian. Programed instruction could be a way to accomplish this need. There has been some study of the teaching of Persian to foreign students, but none of them used linear and context programing to teach Persian words; therefore, the problem underlying this research was the lack of knowledge as to whether instruction with linear or context programing results in the greater learning of selected Persian words.
CHAPTER II
REVIEW OF LITERATURE

As mentioned in the Problem Statement, there have been some materials written in the field of programmed instruction, and some in foreign languages, but there are no studies comparing context and linear programs for teaching the Persian language to English speaking people.

This review will begin with a summary of the work that has been done on programmed instruction; next the studies that have been done in the area of the teaching of foreign languages in general will be discussed, and then material for teaching the Persian language to English speaking people will be treated.

Programed Instruction

A program is a series of small units. Each unit is called a frame, and is based on what the learner already has mastered. Each frame is supposed to add a small increment to this knowledge. The aim of the program is to guide the learner to the terminal behavior, and each frame takes him toward this goal.

The program does not provide the learner with the stimulus-response relationship, but it gives all the necessary guidance to the student and he is expected to find out this relationship for himself.

Repetition and variation are both major parts of the program used to help the learner achieve adequate comprehension. Each frame should be a little different from the previous frame to prevent the learner from getting bored and losing his interest. In order to make
the student provide the correct response the programmer uses "cues" of different kinds (Deterline, 1962).

Lumsdaine (1963) talked about the types of programs saying that they have been thus far clustered around two or three main parts, but some mixtures and some new variations are continually being introduced.

A linear program is a kind of program wherein every frame must be read by all the learners. One kind of linear program, introduced by B. F. Skinner, requires a constructed response. The questions or frames that leave a blank to be filled by the learner require a constructed response. Skinner gives two reasons for the constructed response:

1. Recall is more important than recognition in learning.
2. The act of the responding tends to cause learning; therefore incorrect answers should not be given to the students (Cram, 1961).

The Skinner linear program has the following characteristics (Deterline, 1962):

1. The program contains very small steps.
   A. The act of responding tends to cause learning. Therefore the steps must be small in order to make the student answer correctly.
   B. If the student is not provided with small steps and does not give correct answers, too many mistakes are allowed to happen which make the learner frustrated and discouraged.
2. The student is not provided with a multiple choice answer, but he constructs and composes the answer.
3. The learner is supposed to be actively responding after being given some information.
4. The learner gets immediate reinforcement after each correct response.

5. The main objective of the program is understanding, not rote memorization.

6. All the efforts should be given to make the student answer correctly.

7. The program gives each student the opportunity to progress to his own ability.

Skinner emphasizes that the student should go through the program at his own self-selected rate.

The initial step in writing a linear program is the specification of terminal behavior. It means that an outline should be made to identify every principle, definition, and relationship that the student is supposed to learn.

Sidney Pressey also pioneered the linear program, but his program is a multiple-choice linear program. This program is based on two factors.

1. The law of frequency: The students give a wrong answer sometimes in a multiple-choice linear program, but in each frame they ultimately get the correct answer. They will get more correct answers than incorrect answers by chance.

2. The law of recency: The student may get some wrong answers, but the correct answer comes always at the end and is more likely to be learned and remembered (Cram, 1961).

Another kind of program is called intrinsic programing. The student routes through the program and this route is determined by the
answers he makes to each question. Crowder is the pioneer of this kind of program, and since the learner skips some of the questions, this type of program is also called a branching program. In this program the students who make wrong answers are guided to some frames that the students who do not make errors never see. Students who make different kinds of errors meet different frames. The more capable students usually do not need as much repetition and do not need to go to every frame. In a branching program more capable students do not get bored by too many examples and by repetition (Deterline, 1962).

Context programming is a new kind of programing and can be defined as a highly prompted program. A prompt is a stimulus that makes the correct response more certain. The concept that is going to be taught is presented in the context of other concepts that are already known to the learner. The learner is then supposed to discover the new concept by the aid of known and familiar concepts. In a technical sense, the context program is a linear-type.

Ravis (1971) said that people have done a lot of hard work in writing programs. Some of these programs have been good, and some of them have not been good. A really good program is a very useful instrument. Programed instruction is one of the most important things that has happened in education in the past ten or fifteen years.

One of the best things about a program is that the child gets feedback from being successful. He can see his own improvement.

Lumsdaine (1963) indicated that the evaluation of a program could not be done in an abstract sense. The experiment on a particular program can show the effectiveness of that particular program, but it cannot
evaluate the general method of programing. The experiments so far can support the idea that a well instructed and carefully developed program can help learning both qualitatively and economically. Whether any particular program will do so is another question.

Thus far the experiments cannot support the use of one general type of program over another type. Some programs can be more useful for particular educational purposes, however. The best criteria for evaluating a program could be "external" criteria, the measurement of a program's contribution to students' knowledge and understanding.

**Studies in the Area of Programed Instruction**

Considerable research has been undertaken which relate to programed instruction. Only those studies which relate closely will be reviewed and the supportive studies will be treated.

Schaefer (1963) tested a vocabulary program using "language redundancy." A context program was used with thematic prompting. All of the subjects could successfully translate the foreign words and could recognize most of the words out of context.

Hafner (1965) studied the effectiveness of context aids in teaching. Some of the context aids are parenthetical elements and the contrasting phase. In this study an attempt was made to improve the ability of students to understand meanings. The following context aids were used: Contrast; explanatory words and phrases; meaning expressed in a single sentence and gained through interpretation of sentence (inference); and indirect explanations (inference). This experiment was done with
fifth grade pupils. The results showed that there was no significant
difference between the experimental and control groups in using context
aids for short term instruction. It was suggested that in the area of
vocabulary the use of context aids would be productive.

Anderson, Raymond and Andre (1971) studied feedback in programed
instruction. One of the advantages of programed instruction is the
knowledge of the correct response (KCR) that comes immediately after
the response and facilitates learning. But some researchers found out
that omission of KCR did not make any difference in results. Some
investigators believe that when a student is provided with the correct
response he does not pay enough attention, and copies the correct
response.

Three hundred and fifty-six subjects completed a programed lesson
in two experiments. The experiments were computer-based instruction, and
the subjects could not see the KCR before answering the questions.
The results showed that the subjects who saw KCR after their responses
learned significantly more than those who received no KCR or who could
see KCR before they responded. The KCR was slightly more effective
after wrong responses than after right responses.

It has been shown that some people who have not learned to work
individually fail to respond to individualized programs, which produces
some motivational problems. Several studies have been made to find
the interaction between these variables.

Prompting is a technique that gives the learner some information
to help him give a correct answer. It could be a rule, the first
letter of the correct answer, or anything else. It therefore partially
controls the response.
Anderson, Faust and Roderick (1968) studied prompting. They developed a Russian vocabulary program. Each frame had five sentences with English subjects and Russian predicate nominatives. One hundred and eight college students were divided into two groups. One of the groups completed a heavily prompted program and the other took the standard version of 1,052 frames. The results showed that the group who took the standard version scored higher and took longer to complete the program than those who took the highly prompted program. There was no difference on response made. It was found that the arrangement of lesson material which permits the student to respond correctly without noticing the cue undermines performance.

Stone (1965) studied the effects of learner characteristics on performance in programmed text and conventional text format. The subjects were two sections of a lower division educational psychology class. He concluded:

1. When time was considered as a measure of efficiency programmed instruction was more effective than the conventional method.

2. No difference was found in terms of study habits.

3. There was no significant relationship between students' attitudes toward concepts associated with programmed instruction.

4. There was a significant relationship between students' attitudes and students' abilities.

5. There was no significant change in students attitudes after exposure to the program.

Faust and Anderson (1967) did two experiments with some college students. The Russian vocabulary was used in two versions. One version used only primitive (copying frames) while the other version used
copying frames in which the prompt sentences were embedded in a context of five English-Russian sentences. In both experiments the context group received a significantly higher score on recall. The context program was especially successful for students who hurried through the program.

Backman (1970) studied independent foreign language learning by using programed instruction with some high ability students in high school. He found that the use of programed material combined with self-evaluation provides motivation. He therefore concluded that the use of programed instruction should continue.

Related, Supportive Studies

Several general studies, not specifically related to language learning are included in this section, for two reasons: (1) to establish the probability that programing is an acceptable vehicle for learning, and (2) to give the reader the scope of and justification for the particular principles which were used in developing the programs.

Miller (1967) studied the "Effects of Sequencing and Prior Information on Achievement and Retention From a Linear Instructioned Program." He concluded that the sequence of frames does not make any difference in the students' achievement in a linear program as long as the concepts were presented in the same order.

Smith (1967) did an experiment to identify the characteristics of linear programs which can predict the delayed and immediate learning effect. The linear program was given to college students. He found a significant relationship between the learning criteria for distributed
review and requiring the key term as a response. For syntax complexity a less strong relationship was found.

Hartley (1965) did a comparison study of the linear and branching programs in teaching logarithms to secondary school pupils. In this experiment he found the test and retest results of the branching program were significantly related to intelligence, but such was not the case in the linear program. The results showed that the low ability group profited more from the branching program. There was no difference in the time that was spent on the two programs. However, there was a difference in error rate. The attitude of students toward both programs was the same. This study concluded that the branching program was more sensitive in meeting the needs of individuals.

Erickson (1967) did an experiment on two matched freshman mathematics classes. The experimental group worked on the program for six weeks, while the control group continued with their conventional schedule. The purpose of the study was to find the relation between personality and programmed learning.

Roderick and Anderson (1968) studied the comparison of a program and a summary on both short-answer test items and equivalent multiple-choice test items. They picked 116 high school students and 85 college students as subjects. These subjects were given either the first four sets of the Holland-Skinner (1961) program or a summary of the material contained in the program.

The results showed a higher score on the achievement test for those students who took the program. The program was more useful for high school students than college students. It took four times longer
for college students and did not show any differences in achievement.

Kress (1969) studied the social interaction. Three kinds of interactions were (a) group pacing, (b) public confirmation, and (c) group decision. The subjects were 180 11th grade volunteers. They worked individually or with four classmates. They were homogeneous or heterogeneous in their abilities. The results did not support any difference between the homogeneous or heterogeneous groups. The only difference was found in program completion time, which tended to increase as the degree of interaction increased.

Furukawa (1970) studied the step size in programed instruction for maximal achievement. The findings reported that the small step gives the higher achievement or fewer errors, but a common definition of step size was not available.

Williams (1966) studied 120 sixth graders. The subjects worked through a linear program in one of four versions, (a) standard constructed format, (b) standard multiple-choice format, (c) a combination of both, and (d) a combination format in which response-mode was uncorrelated with item-type. Groups A and C did significantly better than groups B and D on the constructed-response posttest and on gain scores. The use of the varied format did not facilitate performance. The correlation between training mode and type of item was more important.

Spagnoli (1965) studied programed instruction and conventional methods of teaching. He found the programed instruction to be as effective as the conventional method. The teachers whose students were using programed material said they had more free time to do other things in class. The correlated scores tended to suggest that a pupil in the
control group who scored on one test could be predicted to do well on the other test, but such prediction could not be made from the experimental groups' posttest scores.

Orr (1968) compared programmed instruction with conventional methods in terms of retention of learned material. The subjects were divided into two groups. One group took programmed material and the other group received conventional instruction. After one day, one week, and two weeks they were retested. There was no significant difference between the two groups at any time. Since programmed instruction has some other advantages, it should be given careful attention as an effective teaching method.

Daniel and Murdoch (1968) compared a programmed textbook with a conventional textbook, in terms of performance on a content examination. Both texts covered similar material. Half of the subjects took programmed instruction and the other half took the conventional program. The results reported in the study favored the programmed text in terms of performance for all six objective types of items and for five out of eight essay items.

Fahner, Gibbes and Hunt (1968) compared programmed instruction and conventional methods in bookkeeping. One hundred and seven high school bookkeeping students were matched in terms of IQ and pretest scores and divided into two groups. The experimental group was taught by programmed instruction and the control group was taught by conventional methods. Both groups were given three identical posttests. The scores of the experimental group were significantly greater on all three tests at \( P < .025, \ P < .001, \) and \( P < .001 \) levels. They also had a reduction in learning time of 43 percent. The research suggests that the use of programmed instruction be made as homework and in the classroom.
Beane (1965) compared a linear and a branching program. The relative effectiveness of experimental treatment was judged on (a) posttest achievement score (b) retention score, (c) attitude toward programed instruction, (d) performance, (e) time spent on programs, and (f) the efficiency of learning. Results of the study were as follows:

1. There was no significant difference between posttest achievement-retention scores and efficiency scores.

2. The high ability group performed better than the low ability group.

3. The group which used the linear program took significantly longer to complete the program.

4. The students who took programed instruction all had better mean scores than those who took regular classroom instruction.

5. A questionnaire was given seven weeks later and showed a drop in attitude to a neutral position showing no preference for either the programed instruction or the regular classroom instruction.

Teaching Foreign Languages

Duncan (1961) stated that to learn a foreign language means to learn new symbols for objects and ideas. It can be done by associating each symbol with an object or idea, or associating each symbol with other symbols that are already known and have meaning for the learner.

The material selected to use in teaching a foreign language should be interesting for the students and should be about the culture and life of the people whose language is being studied, and should be on the level of the student. If this is done, the learner will be more interested and will get more pleasure studying a foreign language.

Duncan also indicated that although listening and speaking are the primary
activities in learning foreign languages today, some persons study a foreign language in order to be able to read for pleasure and to be able to understand the culture, lives and civilization of people from foreign nations.

Donohue (1968) talks about the differences between second language and first language learning. Second language learning is planned and organized, but first language learning is spontaneous. Memory span is shorter in the case of second language learning. The reinforcements in first language learning are usually primary, but in second language learning they are usually secondary reinforcements. The norm is about 15-20 years in first language learning, and there are many opportunities to practice. The norm for the second language is 10-12 years and the opportunities for practice are limited. In the mother language the child learns the deep and basic structure and then he learns the surface structure, but it is the opposite in the second language. In the first language the child learns the discrimination of sounds, but in the second language he transfers familiar sounds. In first language learning each response is associated with a stimulus, but in the case of second language learning they both associate with a new stimulus, which sometimes results in negative transference.

As Starr (1963) has indicated, when we are teaching a person a foreign language we are dealing with the most critical aspect of human culture. Starr purported that since the 17th century man has put too much effort into understanding and knowing the world around him. But even before that man's basic need has been understanding the needs and expression of others. Man has expressed himself through religion,
art, myth, literature and language. The language is the most complex of man's symbolic systems for expressing himself.

Hayes (1965) stated that there are four new directions in teaching foreign languages. The first one is the description and comparison system of communication both in native and foreign languages. The second direction is the eventual integration of results of these studies. The third direction that has gotten public attention is the use of programmed instruction. The fourth direction is the use of electro-mechanical devices.

The major problem in teaching a foreign language is how to teach the learner from some controlled activity in his language to respond meaningfully to symbols that he has never heard.

Some Experiments in the Area of Foreign Language Instruction

Studies reported have compared different types of representations, sensory modalities and teaching approaches.

Kunihira (1967) did an experiment investigating the effectiveness of perceptual and graphemic representation in order to get the concept of foreign language words. He represented 12 Japanese words in perceptual or graphemic representations. There were four treatment groups. The results of the experiment showed that:

1. Those training with perceptual representations had superior listening comprehension.

2. Those training with perceptual representations were superior in reading comprehension.

3. There were no significant differences in listening comprehension between discriminative context of perceptual or graphemic representations.
4. There seems to be a direct transfer from listening comprehension to reading comprehension.

5. Perceptual representation training showed more significant reminiscence than training with graphemic after one week of representation.

6. "Figure" names showed more reminiscence than "color" names.

7. Training with perceptual representations was less dependent on mental ability compared to training with graphemic representation.

Asher (1964) did an experiment concerning vision and audition in learning languages. The main purpose of the study was to make transfer of learning from one sensory modality to another, especially visual and auditorial relationships. The languages used were Japanese, Turkish, Persian, Russian and Spanish. The second purpose of the study was to give some theoretical construct, and the third purpose was to explore the validity of the predictors for paired-association learning. The results of the study showed a large amount of transfer from vision to audition for Spanish, Turkish, and Persian, but negative transfer for Russian. There was a positive transfer from audition to vision in Spanish, Russian and Japanese, but there was negative transfer for Persian. In general positive transfer was higher from vision to audition than from audition to vision. It was found that congruency is an important factor. The higher the amount of congruency between the spoken and written language the higher the chance of positive transfer between sensory channels. The central mediation hypothesis suggests that the transfer is due to the processing of data in the brain.

Another experiment in the area of foreign language teaching was done by Hauptman (1970). He compared the situational and structural
approaches in teaching Japanese to some third, fourth, fifth, and sixth grade students. The main characteristic of the structural approach is that it is represented from easy to hard material. The difficulty and complexity of the material increases as the student goes further in the program. The chief characteristic of the situational approach is that the material is arranged to fit situations, which are represented in the form of dialogues.

The result of the experiment showed a better performance for groups who had taken the situational approach on the items of the situational test. However, there was no significant difference between groups on the structural test. It was also suggested that in teaching a foreign language the situational approach is better for high intelligence and high language aptitude students than the structural approach.

Wittich (1962) talked about the prediction of success or failure in foreign language study. He stated:

"...The numerous coefficients of correlation found between achievement in foreign languages and various factors were not comparable due to unstandardized procedures in language teaching, evaluation, and research design. Whether or not standardization in foreign language instruction can or should be achieved is open to discussion."

Programed instruction provides a standardized format for studying language instruction. Its implications seem obvious.

**Persian as a Foreign Language**

There has been considerable writing done with regard to teaching Persian to English speaking people. Some valuable previous background work has been done in the area of teaching the Persian language to Americans. The materials are grouped for discussion under elementary
texts, comprehensive texts and grammar texts.

Elementary Texts

Paper and Jazayeri (1955) designed a book to give reading practice. In this book three forms of Persian writing (printed, typed, and hand written) are presented. The different forms of letters (initial, medial, final and independent) are presented.

Persian: Basic Course (1957-1959) contains 142 units. It is designed to teach reading and speaking practice in Persian with the aid of an instructor. It contains grammar drills, comprehension questions, dialogues, two-way translation exercises, and vocabulary words. The book also gives some practice in pronunciation and Persian sounds.

Spoken Persian: Units 1-29 (1959) gives speech practice and is used with an instructor. It contains a Persian-English glossary and some grammar illustration.


Obolensky, Yazdan Panah and K. Nouri wrote a book that could be used by an instructor or by self-instruction. It contains 12 lessons and gives reading and speech practice. The language of this book represents everyday speaking, and discusses the differences between formal and informal speech. Grammar is represented in the basic sentences.

Stilo (1966) designed a book for an intensive course in Persian and also gave some speech practice. The book contains 30 basic lessons and illustrates the grammatical rules and gives some drills. The Persian material is in transcription.
Jazayery (1968) in his book gives some elementary lessons in Persian. The book is intended for use with an instructor and is designed to give speech practice. It contains 50 lessons, and grammar is illustrated in dialogue.

Zangi (1971) has written a series of books in order to meet students' needs in their daily conversations with people. The lessons are in colloquial Persian. The words that are used in lessons are representative of Persian that is used by a majority of the educated people in Iran. Each lesson contains a dialogue, practice, some grammatical rules, vocabulary, and some questions posed to the student.

Hillman (1971) wrote a book in two volumes to meet the American's need in speaking, reading, and writing the Persian language. The first volume represents the Persian alphabet, a course in elementary spoken colloquial Persian, grammar, reading material, and material for studying written literary Persian. Volume two contains some explanation concerning Persian grammar and some material on Persian writing.

Comprehensive Texts

Neysari (1954) studied methods of teaching Persian as a mother and as a foreign language. He suggested that in helping beginners to learn Persian the methods of teaching language arts should be improved by preparing new teachers, helping the present teachers improve their methods, more research, and publication of more books.

Mostofi and Mostofi (1966) wrote a book which gives practice in speech, reading, and writing. The book is supposed to be used with an instructor. The Persian alphabet is summarized, and grammar is explained in structural terms.
Kamshah (1968) in his book represents some passages from some works that have been done by more important Iranian writers in the last 100 years.

Yarmohammadi (1970) has an issue and in this note he talks about the conflicting phonological points between English and Persian.

Marashi (1970) in his book talks about the difficulties involved in teaching Persian to Americans. He believes that a great deal of research is still needed in this area. He has found that one of the major problems in teaching Persian to Americans lies in the teaching of verbs.

Dresden (1958) wrote *A Reader in Modern Persian*. The reader consists of 12 units and each unit has three sections, story, area material, and newspaper selection. Persian words are presented in script, typed and handwritten, and in transcription.

Obolensky, Nabil & K. Nouri (1958) selected sixteen sections from Iranian newspapers to give the reader advice and practice in reading Persian.

Gelpke (1962) made selections from modern Iranian poetry and prose which are represented in the Persian script.

Farzan, Jazaryery, and Paper (1962-1963) wrote a book for students who have a knowledge of Persian of approximately two college semesters. It is in three volumes, elementary, intermediate, and advanced, and is intended to be used with an instructor. Volume one contains 25 selections of newspapers and modern literature and also gives some drills. Volume two contains 15 selections of newspapers and literature, and volume three contains 25 selections. The books talk about history, literature, biography, and contain some selections from technical works.
Larudee (1964) designed a book for people who have learned Persian speech for a college semester, but which can be used with beginners also. This book is supposed to be used with an instructor to give reading practice. It gives drills on reading words and eleven multiple choice lists to test the students' ability to recognize the Persian alphabet with respect to the sounds that they represent.

Arberry (1944) designed a reader to prepare the beginners to read Persian magazines and newspapers. The selection is in Persian script.

Grammar Texts

Nye (1955) in her book The Phonemes and Morphemes of Modern Persian talks about phonemes and morphemes of the Persian language as spoken by the educated people of Tehran. It outlines the Persian syntax and gives some examples after each item.

Tisdall (1959) has a book about Persian grammar. It contains three parts and several lessons in each part. The first part talks about Persian grammar; the second part talks about Arabic elements in the Persian language; and the third part represents eight Persian readings from modern Persian and classical Persian literature. The book also gives some Persian vocabulary words and exercises.

Lambton (1960) wrote a book on grammar to be taught to beginners and as an instruction to literary Persian. The first part contains the major grammar and the second part describes the main Arabic forms that are used in the Persian language.

Elwell - Sutton (1963) wrote a grammar book for beginners which gives grammatical rules of modern Persian. It teaches the Persian alphabet and describes verbs, adverbs, and sentence structure.
Rostogueva (1964) wrote a book about grammar in three parts: Phonetics, morphology, and syntax.


Summary

There have been a proliferation of programed instruction materials relating to the teaching of language. Most of these materials are in the form of linear programs. There has also been many Persian language texts developed to teach Persian to foreigners. None of these materials have been written in program form. A need exists for a programed approach to teach Persian to foreigners.
CHAPTER III

METHOD

Purpose of the Study

The purpose of this study was to investigate the relative effectiveness of linear and context programing in teaching selected Persian words as a foreign language to English speaking people.

In order to accomplish this purpose, the following objectives were established:

1. To determine if two groups of students who study Persian words under two varied programs (linear and context) will obtain significantly different posttest mean scores on matching English and Persian words.

2. To determine if the males and females of the sample, regardless of the program used, will have significantly different responses to various aspects of the programs, including list meaning, word matching, and program type.

3. To determine whether two groups of subjects who took the linear or the context program will obtain significantly different mean scores on the amount of time they spent on the whole program.

4. To determine if there is an interaction between the type of program studied and sex in affecting scores on a posttest that calls for matching of Persian and English words.

Hypotheses

The hypotheses that follow these objectives are null hypotheses.
Since the literature does not report any study clearly related to the present study, there cannot be any justification for making alternative hypotheses. Therefore the null hypotheses that follow the objectives are:

Hypothesis 1: There will be no significant difference between the posttest mean scores of students who study the linear or the context program.

Hypothesis 2: There will be no significant difference between the posttest mean scores of males and females regardless of the type of program used.

Hypothesis 3: There will be no significant difference between students who took the linear or the context program on the amount of time they spent on the program.

Hypothesis 4: There will be no significant interaction between the type of program studied and sex in affecting posttest mean scores.

Procedure

The purpose of the study and the estimated amount of time required of each student was discussed with the subjects before the study started. Each subject was asked if he understood, spoke, read, or wrote the Persian language, as unlikely as that may have been. None were found. The subjects were then randomly assigned to two groups of thirty each made up of fifteen males and fifteen females. One group was given the linear program and the other group received the context program. At the time of the assignment, it was not known which group would receive which type of program. The choice was made randomly by a flip of a coin.
Each program taught sixteen Persian common words. They were selected from the Persian reading textbooks that are used in Elementary schools in Iran. In general, they reflected common, daily encountered concepts. The words taught by both programs were the same and they appeared in the same order.

**Data and Instrumentation**

Three posttests (See Appendix D), consisting of meaning in context, pronunciation, and list meaning of Persian and English words that were taught in two programs were given to both groups. The time, places, and circumstances when tests were administered were kept as similar as possible. The scores of the students on the three posttests gave the data for analysis, along with the time for each. The same scoring procedure was applied to both groups.

**Subjects**

The subjects were American students attending a junior high school in Logan, Utah. They made up a total of sixty students, thirty males and thirty females. A pilot study was done, also, using university students for early clarification and checking of the programs.

**Time Calendar**

The study was done during the 1972-1973 school year. The time required for the study was approximately two hours each week for three weeks. The programs were self-instructed, and each subject received a copy of a linear or a context program and worked individually.
Data Analysis

In order to test the hypotheses, a 2x2 factorial design was used. The 2x2 design consisted of sex (male and female) and program (linear and context). Data was analyzed by analysis of variance as follows (see Figure 1) and a one way analysis of variance was employed to compare the males and females in each group (program):

<table>
<thead>
<tr>
<th>Program</th>
<th>C</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>$\overline{X}_A$</td>
<td>$\overline{X}_B$</td>
</tr>
<tr>
<td>Female</td>
<td>$\overline{X}_C$</td>
<td>$\overline{X}_D$</td>
</tr>
<tr>
<td></td>
<td>$\overline{X}_E$</td>
<td>$\overline{X}_F$</td>
</tr>
</tbody>
</table>

Figure 1. Schema for the Analysis.

1. The posttest mean scores of the two groups of subjects who studied linear or context program was compared ($\overline{X}_E-\overline{X}_F$) to test hypothesis one.

2. The posttest mean scores of males and females was compared regardless of the type of program studied ($\overline{X}_H-\overline{X}_G$) to test hypothesis two.

3. The mean score on total amount of time that each group (linear and context) spent on their programs was compared to test Hypothesis three.
4. The interaction of type of the program studied and sex was analyzed to test Hypothesis four.
CHAPTER IV

RESULTS

A two way analysis of variance technique was employed to study the relative effectiveness of the linear and the context programs.

The elements in the analysis included sex, type of program, time, and interaction between the two programs (linear and context) and sex. Each of the students was given three posttests. The first one was the Persian words in context, the second was the pronounciation of the Persian words, and the third was a list meaning of Persian words.

The findings on each of these variables and the amount of time that each group spent on different parts of each program are reported in the following pages.

Variable 1--Persian in Context

Subjects were presented with items in this form:

I remember one day I went to بازار with my بابا and پدر. The هوای was very cold and پرف had covered everything.

He gave me the می and address of the dentist.

The subjects were asked to recognize and write the meaning of the Persian words.

Table 1 reports the mean scores of linear and context groups, for males and females on this variable. As is seen the context group did slightly better than the linear group and females received a higher mean score than males, although none of these results are significant.
Table 1. Mean Scores of Linear and Context Groups.

<table>
<thead>
<tr>
<th></th>
<th>Linear</th>
<th>Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>11.70</td>
<td>12.97</td>
</tr>
<tr>
<td>Female</td>
<td>13.54</td>
<td>13.27</td>
</tr>
<tr>
<td></td>
<td>12.62</td>
<td>13.12</td>
</tr>
</tbody>
</table>

In order to check for significance an analysis of variance was done (Table 2).

Table 2. Analysis of Variance for Sex and Program.

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>ms</th>
<th>F**</th>
</tr>
</thead>
<tbody>
<tr>
<td>sex</td>
<td>1</td>
<td>16.29</td>
<td>2.27</td>
</tr>
<tr>
<td>program</td>
<td>1</td>
<td>3.56</td>
<td>.49</td>
</tr>
<tr>
<td>SXP*</td>
<td>1</td>
<td>8.33</td>
<td>1.16</td>
</tr>
<tr>
<td>error</td>
<td>56</td>
<td>7.16</td>
<td></td>
</tr>
</tbody>
</table>

*SXP refers to the interaction between programs and sex.
**For significance, F = 4.02 at .05 and 7.12 at .01 levels.

There was no significant difference between the two groups of subjects who took the linear and the context programs, no significant differences between the males and the females, and no interaction between program and sex.
Variable 2--Pronunciation

Variable 2 was the pronunciation of Persian words, and it was represented in the following:

1. هوا
   A  hava
   B  hava
   C  hava
   D  hava
2. باب
   Ba  be  bo  ba
3. لام
   Nam  nam  nem

Table 3 reports the mean scores of each group on this variable. As is seen, females have a higher mean score than males, and the linear and context group scores are very close.

Table 3. Mean Scores on Pronunciation.

<table>
<thead>
<tr>
<th></th>
<th>Linear</th>
<th>Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>11.60</td>
<td>11.62</td>
</tr>
<tr>
<td>Female</td>
<td>12.58</td>
<td>11.48</td>
</tr>
<tr>
<td></td>
<td>11.82</td>
<td>11.55</td>
</tr>
</tbody>
</table>

In order to check for significance an analysis of variance was done (Table 4). There was no significant difference between the linear and context group, and between males and females, and there was no interaction between program and sex.
Table 4. Analysis of Variance for Pronounciation Test

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>ms</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>sex</td>
<td>1</td>
<td>6.79</td>
<td>.80</td>
</tr>
<tr>
<td>program</td>
<td>1</td>
<td>1.01</td>
<td>.11</td>
</tr>
<tr>
<td>PXS</td>
<td>1</td>
<td>9.78</td>
<td>1.15</td>
</tr>
<tr>
<td>error</td>
<td>56</td>
<td>8.44</td>
<td></td>
</tr>
</tbody>
</table>

Variable 3 - List Meaning

On this posttest a list of Persian words was represented to the subjects and they were supposed to write the equivalent meaning in English. The items were presented as follows:

1. نان
2. پول
3. جوراب

Table 5 reports the mean scores of the linear and context groups. As is seen, the females received higher mean scores than the males and the context group did slightly better than the linear group, although the difference was not very great.

In order to check for significance an analysis of variance was done (Table 6).

There was a significant difference at $P < .05$ level between the mean scores of males and females. Females did significantly better on this variable. There was no significant difference between the two programs, and there was no interaction between program and sex.
Table 5. Mean Scores on List Meaning.

<table>
<thead>
<tr>
<th></th>
<th>Linear</th>
<th>Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>10.90</td>
<td>11.91</td>
</tr>
<tr>
<td>Females</td>
<td>13.65</td>
<td>13.28</td>
</tr>
<tr>
<td></td>
<td>12.28</td>
<td>12.60</td>
</tr>
</tbody>
</table>

Table 6. Analysis of Variance for List Meaning Test.

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>ms</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>sex</td>
<td>1</td>
<td>60.28</td>
<td>6.61</td>
</tr>
<tr>
<td>program</td>
<td>1</td>
<td>1.45</td>
<td>.15</td>
</tr>
<tr>
<td>SXP</td>
<td>1</td>
<td>6.70</td>
<td>.73</td>
</tr>
<tr>
<td>error</td>
<td>56</td>
<td>9.11</td>
<td></td>
</tr>
</tbody>
</table>

Variable 4--Total Posttest Score

Variable 4 consists of the total posttest scores of the subjects. It includes the scores on variable 1, variable 2, and variable 3.

Table 7 reports the mean scores of subjects on this variable. As is seen, the context group received a higher mean score than the linear group, and females received higher mean scores than the males.

In order to check for significance an analysis of variance was done (Table 8).
Table 7. Mean Scores on Total Posttest.

<table>
<thead>
<tr>
<th></th>
<th>Linear</th>
<th>Context</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>31.46</td>
<td>36.51</td>
<td>33.98</td>
</tr>
<tr>
<td>Females</td>
<td>37.60</td>
<td>38.05</td>
<td>37.82</td>
</tr>
<tr>
<td></td>
<td>34.53</td>
<td>37.28</td>
<td></td>
</tr>
</tbody>
</table>

Table 8. Analysis of Variance for Total Posttest.

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>ms</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>sex</td>
<td>1</td>
<td>209.12</td>
<td>3.58</td>
</tr>
<tr>
<td>program</td>
<td>1</td>
<td>107.23</td>
<td>1.83</td>
</tr>
<tr>
<td>SXP</td>
<td>1</td>
<td>74.98</td>
<td>1.28</td>
</tr>
<tr>
<td>error</td>
<td>56</td>
<td>58.40</td>
<td></td>
</tr>
</tbody>
</table>

There was no significant difference between programs, between sexes, and there was no interaction between programs and sex. Therefore hypotheses 1, 2, and 4 were accepted.

The program consisted of four parts. On each part four Persian words were presented. By presenting each word a letter of the Persian alphabet was introduced. The amount of time that each student spent on each part of the program was noted and also the amount of time each student spent on the whole program was noted. Then a 2x2 analysis of
variance was employed to study any significant differences. The
findings on the time variable are reported in terms of minutes on the
following pages.

**Variable 5--Time on the First Part**

Table 9 reports the mean time scores of groups on this variable.
As is seen, it took longer for the linear group than for the context
group to finish this part of the program, and it took slightly longer
for females than for males.

Table 9. Time on the First Part

<table>
<thead>
<tr>
<th></th>
<th>Linear</th>
<th>Context</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>42.52</td>
<td>35.67</td>
<td>39.10</td>
</tr>
<tr>
<td>Females</td>
<td>41.75</td>
<td>39.83</td>
<td>40.79</td>
</tr>
</tbody>
</table>

In order to check for significance an analysis of variance was
done (Table 10).

There was no significant difference between groups, nor be-
tween sexes, and there was no interaction between sex and program.

**Variable 6--Time on the Second Part**

Table 11 reports the mean score of each group on the second part
of the program. As is seen the context group finished this part of the
Table 10. Analysis of Variance for Time on First Part.

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>ms</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>sex</td>
<td>1</td>
<td>40.72</td>
<td>.50</td>
</tr>
<tr>
<td>program</td>
<td>1</td>
<td>271.70</td>
<td>3.35</td>
</tr>
<tr>
<td>SXP</td>
<td>1</td>
<td>86.46</td>
<td>1.06</td>
</tr>
<tr>
<td>error</td>
<td>56</td>
<td>81.09</td>
<td></td>
</tr>
</tbody>
</table>

Table 11. Time on the Second Part.

<table>
<thead>
<tr>
<th></th>
<th>Linear</th>
<th>Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>32.21</td>
<td>25.60</td>
</tr>
<tr>
<td>Females</td>
<td>31.52</td>
<td>23.32</td>
</tr>
<tr>
<td></td>
<td>31.86</td>
<td>24.46</td>
</tr>
</tbody>
</table>

program faster than the linear group, and males did it slightly faster than females, but these differences were not significant.

Table 12 reports the significant level analysis of variance on this variable.

There was no significant difference between males and females, and no significant interaction (table 12). There was a significant difference between the context and linear group at the $P < .01$ level of significance. The context group did the program significantly faster than the linear group in completing the second part of the program.
Table 12. Analysis of Variance for Time on the Second Part.

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>ms</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>sex</td>
<td>1</td>
<td>31.16</td>
<td>.53</td>
</tr>
<tr>
<td>program</td>
<td>1</td>
<td>776.09</td>
<td>13.54</td>
</tr>
<tr>
<td>SXP</td>
<td>1</td>
<td>8.93</td>
<td>.15</td>
</tr>
<tr>
<td>error</td>
<td>56</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Variable 7--The Time on the Third Part

Table 13 reports the mean time score that each group received on the third part of the program. The two sexes received similar mean scores, but the context group received a lower mean score than the linear group. This indicates that the context group finished the program faster.

Table 13. Time on the Third Part.

<table>
<thead>
<tr>
<th></th>
<th>Linear</th>
<th>Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>29.85</td>
<td>25.29</td>
</tr>
<tr>
<td>Females</td>
<td>27.83</td>
<td>27.68</td>
</tr>
<tr>
<td></td>
<td>28.84</td>
<td>26.45</td>
</tr>
</tbody>
</table>

Table 14 reports the significant level analysis of variance on this variable.
Table 14. Analysis of Variance for Time on the Third Part.

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>ms</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>sex</td>
<td>1</td>
<td>6.47</td>
<td>.12</td>
</tr>
<tr>
<td>program</td>
<td>1</td>
<td>78.74</td>
<td>2.0</td>
</tr>
<tr>
<td>SXP</td>
<td>1</td>
<td>68.94</td>
<td>1.75</td>
</tr>
<tr>
<td>error</td>
<td>56</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

There was no significant difference between the groups and sexes, and no interaction between sex and program.

Variable 8—Time on the Fourth Part

Table 15 reports the mean score of the amount of time that each group spent on the last part of the program. Although there is no significant difference, the context group finished faster than the linear group, and males finished faster than the females on this part.

Table 15. Time on the Fourth Part.

<table>
<thead>
<tr>
<th></th>
<th>Linear</th>
<th>Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>30.66</td>
<td>25.87</td>
</tr>
<tr>
<td>Females</td>
<td>31.40</td>
<td>29.51</td>
</tr>
<tr>
<td></td>
<td>31.03</td>
<td>27.69</td>
</tr>
</tbody>
</table>
Table 16 reports the significant level analysis of variance on this variable.

Table 16. Analysis of Variance for Time on the Fourth Part.

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>ms</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>sex</td>
<td>1</td>
<td>67.94</td>
<td>.99</td>
</tr>
<tr>
<td>program</td>
<td>1</td>
<td>157.52</td>
<td>2.29</td>
</tr>
<tr>
<td>SXP</td>
<td>1</td>
<td>29.72</td>
<td>.43</td>
</tr>
<tr>
<td>error</td>
<td>56</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

There was no significant difference between programs, and no significant difference between the sexes, and no interaction between sex and the program.

Variable 9--The Total Amount of Time

Table 17 reports the mean scores of the amount of time that each group spent on whole programs. The context group, as is seen, finished the program faster than the linear group, and males did it slightly faster than females.

Table 18 reports the significant level analysis of variance on this variable.

There was a significant difference at $P < .05$ between the two groups. The context group performed significantly faster than the linear group. However, there was no significant difference between males and
Table 17. The Total Amount of Time.

<table>
<thead>
<tr>
<th></th>
<th>Linear</th>
<th>Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>134.0</td>
<td>110.25</td>
</tr>
<tr>
<td>Females</td>
<td>132.31</td>
<td>120.83</td>
</tr>
<tr>
<td></td>
<td>133.15</td>
<td>115.54</td>
</tr>
</tbody>
</table>

Table 18. Analysis of Variance for the Total Amount of Time.

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>ms</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>sex</td>
<td>1</td>
<td>279.80</td>
<td>.44</td>
</tr>
<tr>
<td>program</td>
<td>1</td>
<td>4394.97</td>
<td>6.94*</td>
</tr>
<tr>
<td>SXP</td>
<td>1</td>
<td>533.68</td>
<td>.84</td>
</tr>
<tr>
<td>error</td>
<td>56</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Significant at the P < .05 level.

females on the total amount of time spent on the program. The results of the experiment show that the context program was worked faster than the linear program. Therefore, Hypothesis three was rejected.

Males and Females

A one way analysis of variance technique was employed to determine the significant difference between males and females within the group.
The results of the linear group are reported in table 19. Females got significantly higher mean scores on the list meaning at $P < .05$ level. Females also got significantly higher mean scores on the total posttest at $P < .05$ level, but there was no significant difference between males and females in terms of time.

The results of a one way analysis of variance on the context group is reported in table 20. There were no significant differences between males and females on any of these variables.

**Summary**

The data obtained from the two groups of subjects who took the linear or context program was compared with a two way analysis of variance. The elements included in the analysis were programs, sex, time, and interaction between sex and program. All the subjects were given three posttests on Persian in context, pronunciation, and list meaning.

The findings indicate that there was no significant difference between the mean scores of the linear and context groups, but there was a significant difference on total time. The context group finished the program faster at $P < .05$ level of significance than the linear group. There was a significant difference between the two groups ($P < .01$) on the time it took to complete the second part of the program, with the context group being faster. Although there was no significant difference on amount of learning, the context group got a higher mean
Table 19. Sex Differences on the Linear Program for variables 1-9.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>means Males</td>
<td>11.84</td>
<td>11.15</td>
<td>11.15</td>
<td>31.94</td>
<td>42.68</td>
<td>32.05</td>
<td>29.84</td>
<td>30.89</td>
<td>134.42</td>
</tr>
<tr>
<td>ms</td>
<td>23.57</td>
<td>16.17</td>
<td>52.37</td>
<td>262.94</td>
<td>4.18</td>
<td>3.30</td>
<td>28.53</td>
<td>3.83</td>
<td>19.98</td>
</tr>
<tr>
<td>means Females</td>
<td>13.68</td>
<td>12.68</td>
<td>13.90</td>
<td>38.09</td>
<td>41.90</td>
<td>31.36</td>
<td>27.81</td>
<td>27.81</td>
<td>132.72</td>
</tr>
<tr>
<td>ms</td>
<td>8.02</td>
<td>6.98</td>
<td>9.90</td>
<td>61.35</td>
<td>94.96</td>
<td>59.91</td>
<td>41.43</td>
<td>99.22</td>
<td>237.67</td>
</tr>
<tr>
<td>F**</td>
<td>2.93</td>
<td>2.31</td>
<td>5.29*</td>
<td>4.28*</td>
<td>.04</td>
<td>.05</td>
<td>.68</td>
<td>.038</td>
<td>.027</td>
</tr>
</tbody>
</table>

*Significant at the P .05 level.
**Significant F = 4.20 at .05 level and 7.64 at .01 level.

Table 20. Sex Differences on the Context Program for variables 1-9

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Males</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>means</td>
<td>13.11</td>
<td>11.72</td>
<td>12.16</td>
<td>37.00</td>
<td>35.83</td>
<td>25.44</td>
<td>25.27</td>
<td>26.11</td>
<td>110.66</td>
</tr>
<tr>
<td>ms</td>
<td>.67</td>
<td>.13</td>
<td>13.61</td>
<td>17.11</td>
<td>125.00</td>
<td>37.35</td>
<td>41.08</td>
<td>95.33</td>
<td>806.45</td>
</tr>
<tr>
<td><strong>Females</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>means</td>
<td>13.41</td>
<td>11.58</td>
<td>13.54</td>
<td>38.54</td>
<td>40.00</td>
<td>23.16</td>
<td>27.66</td>
<td>29.75</td>
<td>121.25</td>
</tr>
<tr>
<td>ms</td>
<td>6.31</td>
<td>9.89</td>
<td>8.27</td>
<td>55.45</td>
<td>67.23</td>
<td>57.28</td>
<td>37.15</td>
<td>37.78</td>
<td>527.72</td>
</tr>
<tr>
<td>F</td>
<td>.10</td>
<td>.014</td>
<td>1.64</td>
<td>.30</td>
<td>1.83</td>
<td>.65</td>
<td>1.10</td>
<td>2.25</td>
<td>1.52</td>
</tr>
</tbody>
</table>

Variables 1-9:  
1. Persian in context  
2. Pronunciation  
3. List Meaning  
4. Total Posttest Score  
5. Time on First Part of Program  
6. Time on second part of program  
7. Time on third part of program  
8. Time on fourth part of program  
9. Interaction between sex and program
score on the total posttest variable and also on list meaning. The comparison of males and females did show a significant difference at \( P < .05 \) level on list meaning. Females got a higher mean score on this variable. There was no interaction between sex and program.

A one way analysis of variance was employed to compare males and females within each group, and did not show any significant difference on the context program. However, on the linear program females received a significantly higher mean score at \( P < .05 \) level on list meaning, and they also got a significantly higher mean score at \( P < .05 \) level on the total posttest variable.

Table 21 summarizes the general effectiveness of the linear as compared to the context program as to content.

<table>
<thead>
<tr>
<th>Programs</th>
<th>word in context</th>
<th>pronunciation</th>
<th>list meaning</th>
<th>total score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linear Programs</td>
<td>12.62</td>
<td>11.82</td>
<td>12.28</td>
<td>34.53</td>
</tr>
<tr>
<td>Context</td>
<td>13.12</td>
<td>11.55</td>
<td>12.60</td>
<td>37.28</td>
</tr>
</tbody>
</table>

Table 22 gives the total time for each of the tests. Significant differences on them have been reported earlier, part by part.
Table 22. Amount of Time on Context and Linear Programs.

<table>
<thead>
<tr>
<th></th>
<th>time on part one</th>
<th>time on part two</th>
<th>time on part three</th>
<th>time on part four</th>
<th>total time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linear Program</td>
<td>42.13</td>
<td>31.82</td>
<td>28.84</td>
<td>31.03</td>
<td>133.15</td>
</tr>
<tr>
<td>Context</td>
<td>37.76</td>
<td>24.46</td>
<td>26.45</td>
<td>27.69</td>
<td>115.54</td>
</tr>
</tbody>
</table>
CHAPTER V
DISCUSSION

In this discussion, we are reflecting and analyzing some of the major trends, limitations, and projections which were a product of the total study, but which could not be reported in the formal part of the study.

Programed Instruction

As stressed in the review of literature, people have written a variety of "programs" in different areas and on different subjects. Some of these programs have been helpful in teaching. In the last fifteen years the area of programed instruction has become important to education. If languages could be taught by programed instruction it would be very helpful for motivation, especially for those who want to learn a foreign language rapidly, with lessened competition, and without being obligated to attend class.

The literature supports the conclusion that programed instruction can be an effective mode of instruction.

An often mentioned advantage is that of self-pacing and the saving of both teachers' and students' time.

In applying a program, the age and maturation of the subjects must be considered. For very young children who still have not learned to work independently it is hard to work on programed materials. Even for adults who have not learned to work individually, programed instruction sometimes cannot be effective. These kinds of people need
more direct instruction from a teacher or an instructor.

Programed material has been shown to be effective for less motivated persons when it helps them become motivated by producing correct answers and getting immediate feedback. It is also effective for persons who want to work individually on their own selected rate, without any pressure or competition.

Although the literature reports the effectiveness of programed instruction in most situations and for most subjects, no program can be effective for everybody. Different kinds of programs can be relatively effective for different persons with different capacities, interests and motivations.

Programing is a hard and valuable job. It must be evaluated by experiments to show its effectiveness and to determine whether it is valuable as a tool in teaching and can be considered a good program. However, if a program cannot meet the need of learners and be effective it is considered to be a poor program regardless of its sophistication.

Programs in General

The main objective of any program is understanding, not rote memorization. The objective of the present study was to teach some Persian words and letters in the Persian alphabet to English speaking people as presented in two different forms (linear and context). This was done in order to compare the relative effectiveness of the programs.

All the attempts were made to prevent rote memorization. Programs were developed to teach word recognition, reading, meaning of the words, pronunciation and some letters of the alphabet. The programs did not
ask for mere copying between stimulus and response, but different kinds of cues and prompts were given to enable the subjects to find out these relationships themselves. As is suggested by Skinner, the linear program was developed in small steps to help the subject respond correctly and give him encouragement by producing correct answers. As with any program, too many mistakes would make the subjects frustrated and cause them to lose their motivation.

The subjects had to read all the steps, frames and directions, otherwise they were not able to follow the program. Since the programs were in a foreign language branching it and skipping some frames or steps could have produced confusion and misunderstanding. The objective of a branching program is to help the more capable students not get bored and tired, because subjects can skip some parts of the program that are a repetition of former parts. In the present program, although all the subjects had to read every step, they still had the opportunity to follow the program on their own selected rate. Therefore more capable students would not get bored and lose their motivation.

The subjects were given some general information about the Persian language on the first page of each program. Each of the two programs (linear and context) consisted of four parts. Each part represented four words and four letters. Both programs represented the same words and letters, in the same order, but in two different forms. Each part consisted of four lessons, and each lesson taught a new word and a new letter. The letters were represented in a whole word at first and then in isolation. On each word pronunciation, shape, and meaning of the
word was taught. Since some letters had more than one shape and different shapes in different positions, any time a new letter was presented all of its different shapes were given. Each lesson started with a new word, but the previous word was presented one more time. Each word represents a new letter, and the words started from easier to harder.

The pronunciation of words was taught phonetically, and some examples of some English words were given to prevent misunderstanding or confusion. The programs were developed as an individualized program, and the subjects were able to follow through without an instructor.

After each designated part of the program, the subjects were given tests on meaning, pronunciation, and alphabet letters. These tests were identical in both programs. In-program tests were not scored, but were used just as a practice. The correct answers of the questions were given right after each test and this gave the subjects the opportunity to do self-correction. Different lessons on each part were related in order to make the program sensible.

**Linear Program**

One of the major characteristics of a linear program is its small steps. The literature supports this notion that small steps give higher achievement. A foreign language program should be developed in small steps to help the learner learn faster and keep him from becoming frustrated. During the first lessons the program takes very small steps to make it as clear as possible. The frames are organized in the same way, but each of them is a little different from others so that the
subjects do not become bored. Some of the frames just repeat some materials, and some of the frames present new materials.

Another characteristic of a linear program is that the subject must be active. After presentation of each lesson of the present program the subject was asked some questions in a new frame and instructed to fill in some blanks. The correct answers on each question were given right after to give the learner the immediate feedback, one of the characteristics of a linear program. In order to prevent rote memorization and copying of the frames, answers to each exercise were given on the next page.

The subjects had the opportunity to progress according to their own ability, and could finish the program on their own self-selected rate. The program gave all kinds of cues and prompts to enable the subjects to make correct responses. This is one of the points that Skinner emphasizes.

In order to make the subjects able to test their own learning, some of the familiar words were mixed with some of the new words in some frames, and the subjects were asked to recognize them. Also, some frames gave a mixture of some new and familiar letters. As was mentioned in the previous section, after each part of the program the subjects took three tests, and were provided with correct answers to evaluate their own learning.

Context Program

The literature did not report any studies on context programing. This kind of program is distinctive, especially in the area of foreign
languages. The context program is a highly prompted program. Anderson and Faust (1967) studied prompting in a Russian vocabulary program. They found that the standard version program was more effective and took longer to complete than the highly prompted program. This was not context prompting.

In the present program, each lesson started out being highly prompted. Each new word was represented with its English meaning and a cue was given for the direction of reading. Prompts were eliminated during progress through the program. At the end of each lesson, the subject was given the Persian word without any prompt and he was supposed to be able to read it and know its meaning. The words were related in each part of the program in order to make a sensible context. The context was in the dialogue method and talked about the life of people. The letters were presented in words at first and then in isolation.

The programmers emphasize the importance of immediate feedback. In the context program the students are tested after each part on the materials they had been taught and were provided with right answers immediately after. Each word was represented by its pronunciation, shape and meaning. The meaning was in parentheses. Every new letter referred the subject to the bottom of the page and gave him necessary information.

The results of the study showed that these context aids had been effective and supported Hafner's (1965) studies concerning context aids such as parenthetical items, and the contrasting phase on teaching vocabulary. He suggested that the use of context aids is productive.
During the present program the context aids vanished as the program progressed.

Developing the Posttests

The posttest consisted of three subtests. Test one included some Persian words in English contexts. The subjects were asked to read the English paragraphs and give the meaning of the Persian words. Test two was on pronunciation of the Persian words. Each word was presented with four alternate pronunciations in multiple choice form. These alternatives were very close to each other, and only one of them was correct. The subjects were asked to choose the correct pronunciation. Test three was a list of Persian words and the subjects had to write their English meanings. The tests were about all the words that had been taught in the programs.

Test three was developed in order to show if there had been any rote memorization. Since test one and test three tested the same thing, but one in context and another on a list to see if there was any difference in favor of context, it could be an indication of rote memorization. The results of the tests did not show that rote memorization was taking place.

Each test consisted of sixteen words, and the maximum score on each subtest was sixteen. The subjects were given the first test without any limitation on time, and after they finished the first test they were given the second test, and then the third test.

Subjects and Organization

For this study sixty subjects were used. The subjects were naive
to the Persian language. They were relatively homogeneous in terms of age and education. They were old enough to be able to work independently and to be able to read English. Most tourists will have completed this level.

The sixty male and female students from two seventh grade classes in an American junior high school were used. These students were divided into male and female categories and then all of them were assigned to either the linear or the context program randomly. The programs were given during the English class period.

In the first session the first part of the program was presented to both groups. They were allowed to follow the programs on their own self-selected rate, and there was no time limit. Each subject was given three tests on meaning, pronunciation, and letters of the alphabet after finishing each part of the program. They were provided with correct answers right after each question. Therefore they could get immediate feedback and do self-correction. When they finished the first part they were given the second part, and then the third and fourth parts.

The subjects were not allowed to take the programs home. In order to keep everything equal for all the subjects, they were allowed to work on the programs only during the class period. They all started the programs at the same time during each session, but they finished it in different times. Therefore the experimenter could take notes on the time that each subject spent on each part of the program.

During these sessions the subjects were interested and had a positive attitude. After working on the programs for a few minutes
the context group seemed more relaxed, and it took them a shorter time to learn to follow the program.

The programs were individualized so that the subjects could get all the information and directions from the programs. However, the linear group asked some questions about following the frames which were answered on the spot. Both groups followed the programs smoothly and seemed comfortable with them. As they went further in the programs the linear group could follow the program as well as the context group could, as evidenced by the lack of need to ask procedural questions.

The results of the present study support Bean (1965) in terms of time. On his experiment a linear group took a significantly longer time to complete the program compared to those using another form. In this study, the context group finished the program faster than the linear group.

The important point to be mentioned here is that although the program was in a foreign language and subjects were completely naive about it, they were very interested and did not want to stop working on it. They followed the progress much faster and better than had been proposed.

**Pilot Study**

In the early writing of the programs each (linear and context) were given to three subjects who were also naive in the Persian language. The whole linear program and the whole context program that were given in the pilot study did not exhibit any structural problems. Subjects could follow the programs without difficulty. But, it revealed that
the subjects had a hard time remembering the direction to read. They sometimes kept reading from left to right. Therefore, it was decided to give some more cues in both programs so subjects could remember to read from right to left. Of course, on the first page of both programs the subjects were informed about the direction of reading in Persian, but it seemed that they needed more instruction as they followed the program.

The tests that were given after each part of the programs seemed to be very useful. The subjects mentioned that those tests helped them to brush up on what they had learned and to find their weaknesses. The subjects were asked to take a note of the amount of time that they spent on each word. Both the linear and context programs revealed that the first few words took them longer, and as the program progressed, the subjects learned faster. The subjects who took the linear program mentioned that they felt more comfortable as they went further through the program. Although the programs had not asked them to practice writing Persian words and letters, some of them had learned it.

Problems in Developing the Programs

Since the review of literature did not report any comparison between linear and context programing in general and in the area of foreign language instruction specifically, the author did not have any specific material in hand that could help her in developing these programs.

In teaching a foreign language we deal with one of the critical aspects of human life. Man expresses himself in different ways, and
one of the most important and complex ways is through language. As Hayes (1965) mentions, there are four new directions in teaching foreign languages. One of these directions that has received public attention is the use of programmed instruction.

It is clear, however, that in learning a foreign language the subject has to learn new symbols and associate them with the symbols that he already knows in his native language. If these symbols are associated with the culture and life of the people whose language he is studying, the program becomes more effective by raising the interest of the learner. Since the present program was in a foreign language that was completely new for the subjects, the pilot study was needed to make it as clear as possible. It was intended that in each lesson only one word and one letter would be presented. In order to determine which word was more effective, it was decided to choose some words that have more use in daily conversation. Related words in each part of the program were chosen to start from, also it was decided to introduce only one new letter with each word.

The words were chosen from the elementary Persian textbooks. Their pronunciation was taught as it is pronounced by most educated people in Tehran. Since in learning a foreign language the learner has to transfer to symbols and relate them to his mother language, if materials are not presented clearly negative transfer and misunderstanding may result. In the present programs each new word was given with its pronunciation and its English meaning to make the transfer of symbols easier and to prevent misunderstanding and negative transfer. Some Persian letters mentioned in the programs have different shapes
in different positions. All the attempts were made to make this clear for the subjects and to give them enough samples and examples.

One of the major problems in developing programs lies in the direction of writing. As is mentioned in the program, Persian is written from right to left. It is hard for an English speaker who is a beginner in learning Persian to remember this. In the programs the subjects were provided with some cues in order to remember this.

To place into consideration all the factors that were mentioned above the author had to revise the programs many times to make them as effective as possible.

**Limitation**

No single program is complete enough to meet the needs of different learners. The present study is no exception, especially as the literature does not show any background for this study, and this is the first time that Persian was developed in linear and context programs. Therefore, there will be some limitations on it.

In the present program some selected words were taught. In the future, the program could be enlarged to include more words. Programs also need to be developed to teach writing and grammar.

These programs were given only to sixty subjects. The program needs to be tested on more subjects to give a more general result. The results of the programs are based on the performance of students on a restricted set of words. The general aspect was that all the letters were included in the full program.

It is hoped that in the future researchers will consider all the
possibilities for making a good and effective program, and make it possible for more and more people to study Persian.

**Suggestions for Further Research and Application**

The following recommendations are suggested for further research and application in this area:

1. The literature supports a value for learning languages, including Persian for Americans.

2. Almost all visitors who go to a foreign country are interested and need to know some daily vocabulary of the people in that country. A program guide can be made to meet the needs of these people. This would, of course, be most useful as a pre-trip experience.

3. Context programming shows promise as a programming technique which is interesting and time saving. The interested researcher can develop some other context programs in language or other areas to support these findings.
CHAPTER VI
SUMMARY AND CONCLUSIONS

The Problem

The main purpose of this study was to compare the relative effectiveness of a linear and a context program in teaching some Persian words to English speaking people.

The Review of Literature

Programed instruction is one of the major topics that educators are dealing with today. The linear style that was pioneered by Skinner and Pressey has some notable characteristics: Small steps; immediate feedback; understanding, not rote memorization; helping students answer correctly; and the activity of learners in working through the program.

The context style is a distinctive approach defined as being highly prompted. It does not give any information unless it is included in the context of a full narrative. Some may prefer to call it an extended linear style.

The review of the literature revealed some previous work in the area of programed instruction in the last ten or fifteen years. Educators give serious consideration to programed instruction. The literature reports many successful programs for both teacher and students in terms of time, motivation of the learners, and in the amount of learning. The literature reports studies that compared programed materials with
conventional methods of teaching. Many of these studies with programed materials have proved to be significantly more effective than traditional styles.

Research has supported the idea that the immediate feedback, small steps, and activity of learners helped the learners to become more confident, more motivated, and more satisfied. Competition is one of the factors that bothers some students. Programed instruction gives the opportunity to the learner to progress at his own rate without competing with others, and this is favored by some learners.

The literature reports some studies which compare linear with other kinds of programs. In some situations and with some subjects the linear program has been more effective than contrasting styles. None of the programs could be favored in all of the situations. Therefore some programmers are in favor of the linear program and some are in favor of less formal styles. Some educators believe that a branching program, for example, is more effective for more intelligent learners because it gives them the chance to skip some steps. Therefore they will not get bored by reading all the frames as is done in the linear program.

The literature does not report any study concerning the context program as such, but it reveals a few studies on context aids and some other subjects. However, none of these are closely related to the present study. Some works have been done by some Iranian and American writers in teaching Persian to English speaking people. Most of these studies are about grammar and the literature reports one that concerns itself with teaching Persian verbs. But again, none of them concern linear and context programing.
Method

In order to find out the relative effectiveness of linear and context programs in terms of time, amount of learning, differences between sexes, and interaction between programs and sex, four major hypotheses were made. Each of these hypotheses tested one of the objectives of the study.

The subjects of the study were sixty seventh grade students from Logan Junior High School in Logan, Utah. These subjects were randomly assigned to one of the two programs. Each group consisted of thirty subjects, fifteen males and fifteen females.

The performance level of the subjects on three posttests in pronunciation, words in context and list meaning was the criterion for evaluation of the amount of learning. The mean score of amount of time spent on the program was the criterion for determining the effectiveness of the programs in terms of time spent completing them. The data was analyzed by a 2x2 analysis of variance design and the mean scores of males and females in each program (linear and context) were analyzed by a one way analysis of variance.

The results of the study did not reveal any significant difference in favor of the linear or context programs in terms of learning, but it showed a significant difference in favor of the context program at $P < .05$ level on the total time that each group spent on the whole program. The one way analysis of variance showed that the females in the linear program received a significantly higher mean score at $P < .05$ level on list meaning and total posttest than males.
Conclusion

The most representative conclusion is that students completed the context programs more rapidly, with no loss in performance level.


Daniel, William J. and Peter Murdock. 1968. Effectiveness of learning from a programed text compared with a conventional text covering the same material. Journal of Educational Psychology 59(6):425-431.


Miller, Herbert Ralph. 1967. Effects of sequencing and prior information on achievement and retention from a linear instructional program. Dissertation Abstracts 1968 (28) 4007-A.


Neysari, Salim. 1954. Comparative Method of Teaching Persian as the Mother Tongue and as a Foreign Tongue, with special References to the Work of Beginners. Indiana University.


Smith, Martin Edward. 1967. Prediction of effects with selected characteristics of linear programed instruction. DA 508-A. Purdue University.


Yarmohammadi, Lotfollah. A note on constructive analysis. English Language Teaching 25:7619 - 0.70.

APPENDICES
Appendices A, B and C contain the program materials used to teach Persian to some junior high school students. Appendix A contains the linear program, Appendix B contains the context program, and Appendix C concludes the context program.

In order to conserve space, the materials are presented in a way different than they were presented to the students. Two pages of each program are included on each typewritten page. The reader should be aware that they were presented to the students with each page following the previous page on a separate sheet of paper. This was especially necessitated when one page contained a test and the following page contained the answers to that test. In order to eliminate confusion, and to allow the reader to see how the program was originally presented, a line has been drawn through the middle of each page to separate two pages of the program materials.

Also, the Persian words were originally printed in by hand because of the difficulty of locating a typewriter with Persian letters. One has been located, and so the final materials are typed in instead of printed in as they originally were.

Appendix D contains the three posttests that were administered to the subjects after completion of the programs.
A LINEAR PROGRAM IN TEACHING SOME PERSIAN WORDS AND LETTERS

You are going to learn some Persian words and letters in this program.

In studying the Persian language the learner should remember:

1. Persian is written from right to left.

2. There are no capital letters in Persian.

Exercise 1.

3. Fill in the blanks.
   Persian is written from _____ to ____.

If you do not know see #1.

X the correct answer:

4. In Persian we have, we do not have capital letters.

Check your answer with information on page 1.
Read the following frames.

5. pronunciation  shape  meaning
   bā bā  ل.ل  father

6. pronounce these  bā bā  ل.ل
   (1)  (2)
   a as art, calm

If you cannot pronounce them go to the teacher.

7. ل.ل is a two syllable word. bā/_____?
   bā

8. Now we break the word ل.ل into letters.
   a  b  a  b
   ٌ ٠ ٌ

   In the following frame you can see two Persian and English equivalent letters.

9. b  a
   ٌ ٠
Exercise 2.

Fill in the blanks.

A

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

B

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>b</td>
<td>b</td>
<td>a</td>
<td></td>
</tr>
</tbody>
</table>

A. ١
B. ۱

Note 1.

Some letters have more than one shape in Persian. They are larger in final and isolated positions and smaller in initial and medial positions.

Example

<table>
<thead>
<tr>
<th>initial</th>
<th>medial</th>
<th>final</th>
<th>isolated</th>
</tr>
</thead>
<tbody>
<tr>
<td>ب</td>
<td>ب</td>
<td>ب</td>
<td>ب</td>
</tr>
</tbody>
</table>

10. These variations are all b's.
Exercise 3.

Which of the following is b?

11. A B C D E F G H I

Correct answers are on the next page, but before looking at the next page, try to answer it yourself.

12. Variation of b's in Persian words.

Exercise 4.

13. x the b's in the following words.

Exercise 5.

X the a's in the following words.
Key, exercise 5.

16. Pronounce this: 

\[ \text{ba'ba} \]

Circle the word that you can read:

\[ \text{نا نن} \]

17. Yes, the second one means ...

\[ \text{father} \]
Now we are going to learn a new word.

18. Pronunciation  shape  meaning
   mā mā  م م mother

19. You know the letter "١", it is an
   ________?  
   a

20. The new letter in mā mā is م م
   final and isolated  initial and medial
   m

21. These variations are all m's
   م م م م م

Exercise 6.
Which of the following are m's?

22. A B C D E F G H I J K
   م م ن ب ب ب ب ب

23. These variations are all m's in Persian.
   م م م م م

Exercise 7.
X the m's in the following words.

24. م م م م م م م م
   م م رام
   م م م م م م م م م م م
### Key, exercise 6.

<table>
<thead>
<tr>
<th>A</th>
<th>نمک</th>
<th>25</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>بادکنک</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>پارس</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>شام</td>
<td></td>
</tr>
<tr>
<td>J</td>
<td>راز</td>
<td></td>
</tr>
<tr>
<td>K</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Exercise 8.

X the acceptable form

<table>
<thead>
<tr>
<th>initial m</th>
<th>medial m</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>م</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>final m</th>
<th>isolated m</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>م</td>
</tr>
</tbody>
</table>

If you do not know, read #20 over again.
Exercise 9.

Fill in the blanks

A

1 2 3 4

B

1 2 3 4

Which of the preceding words is new?

28. The last one?

29. pronunciation shape meaning

nan

bread

26. is a _____ syllable word.

two
30. Which letters are new in نان?

31. initial medial final isolated
   n  n  n  n
   ن ن ن ن

32. نان (nan) means ________?

bread

nan

-17-

-18-
33. These variations are all n's.

Exercise 10.

Which of the following is n?

A B C D E F G H I J

34. Variation of n's in Persian words.

Exercise 11.

X the n's in the following words.

35. 

36. 

Key, exercise 10.

Key, exercise 11.

A C D E H I
37. Circle the new word.

38. pronunciation shape meaning
   nam  מ  name

39. Is any new letter in מ (nam)?
   no

Exercise 12.
Fill in the blank.

A

| 1 | 2 | 3 |

B

| 1 | 2 | 3 |
Test 1.

Which one is the correct pronunciation of the following words?

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
</table>
| ٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍ~
| ٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍٍـٍـٍـٍـٍـٍـٍٍـٍـٍـٍٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍ~

Key, test 1.

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
</table>
| ٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍٍـٍـٍـٍ~
| ٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍٍ~

Test 2.

Write the meaning of the following words.

<table>
<thead>
<tr>
<th></th>
<th>=</th>
</tr>
</thead>
</table>
| ٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍ~
| ٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍ~
| ٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍ~
| ٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍـٍ~

-24-
Key, test 2.

- mother
- father
- name
- bread

Key, test 3.

- M
- N
- B
- A

Test 3.

Write the equivalent sounds of the following letters.

- M = __________?
- N = __________?
- B = __________?
- 1 = __________?

-25-

-26-
Read the following frames.

40 pronunciation shape meaning

dandan  دندان tooth

a as act, bat

41 Which letter is not familiar to you in دندان (dandan)?

42 The new letter in dandan is

initial, medial, final, isolated
d d d d

43  د has the same, different shape in different positions.

same

44 These variations are all d's

Exercise 13.

Which of the following are d's?

A B C D E F G H I J K

\[ ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر ر R

Find the correct answers on the next page.

But, try to answer it at first.
Key, Exercise 13

A
B
E
H
I
K

Variation of d's in some words.

Exercise 14.

X the d's in the following words.

Key, Exercise 14

 missed

Pronounce دندان (dándán). It means___?
tooth

X the correct answer.

two

Break it into syllables دان/___?

Dan
Exercise 15.

Fill in the blanks

A

| 1 | 2 | 3 | 4 | 5 |

B

dan

| 1 | 2 | 3 | 4 | 5 |

A. أ

B. a

Which of these following words are new?

51

شام

52

pronunciation shape meaning

sham شام supper

Which letter is new in شام؟

ش

شام (sham) means _____?

supper

The variation of sh's.

55

initial medial final isolated

sh sh sh sh

ش ش ش ش

56

Exercise 16.

Which of the following are sh's?

57

A B C D E F G H

ش ش ش ش ش ش ش
### Key, Exercise 16

<table>
<thead>
<tr>
<th>A</th>
<th>D</th>
<th>E</th>
<th>G</th>
<th>H</th>
</tr>
</thead>
</table>

### Variation of sh's in some words

Shān  shād  shāh  Rād  Shāh  Rād

### Exercise 17.

X the sh's in the following words.

Dārāsh  shor  Rās  Shād  Shān

### Key, Exercise 17

| داراپی | دخور | ریس | نیاح | پرایه |

### Exercise 18.

Fill in the blanks

A |  
1 2 3

B | sh ā |
1 2 3

A. m  
B. m
Exercise 19.
X the acceptable form

<table>
<thead>
<tr>
<th>initial sh</th>
<th>medial sh</th>
</tr>
</thead>
<tbody>
<tr>
<td>ش</td>
<td>ش</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>isolated sh</th>
<th>final sh</th>
</tr>
</thead>
<tbody>
<tr>
<td>س</td>
<td>س</td>
</tr>
</tbody>
</table>

If you do not know, refer to #55.

Circle the word that you cannot read.

<table>
<thead>
<tr>
<th>شام</th>
<th>بابا</th>
<th>در</th>
<th>نا م</th>
</tr>
</thead>
</table>

pronunciation | shape | meaning
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>دَار</td>
<td>در</td>
<td>door</td>
</tr>
</tbody>
</table>

Exercise 20
Fill in the blanks

A

Which letter is new in در؟

initial | medial | final | isolated
---|--------|--------|--------
ر | ر | ر | ر

(dَار) means _______?

door

B

Which letter is new in در؟

initial | medial | final | isolated
---|--------|--------|--------
ر | ر | ر | ر

(dَار) means _______?

door
These variations are all r's.

Exercise 21.
Which of the following is r?

A B C D E F G H I

Variation of r's in some words.

Exercise 22
X the r's in the following words.
Read the following words and X the new one.

70  تام، پاپا درس در نان

71  pronunciation  shape  meaning
dars  درس  lesson

s as in see, miss

Exercise 22.

The new letter in درس is _____?

NOTE 2

Some letters in the Persian alphabet can be distinguished by the number of dots like (sh) and (s). The difference between these two letters (ش and ن) is that ش is represented with three dots above it.

These variations are all s's.

Exercise 23.

Which of the following letters are (s)?

A  B  C  D  E  F  G  H

س س س س س س س
Key, Exercise 23.

A
D
E
G
H

Variation of s's in some words.

Exercise 24.

X the s's in the following words.

Key, Exercise 24

Exercise 25

Fill in the blanks.

A
B
Test 4. What is the correct pronunciation of the following words?

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>دَرْس</td>
<td>dārs</td>
<td>dōrs</td>
<td>dārs</td>
</tr>
<tr>
<td>شَام</td>
<td>šāme</td>
<td>šām</td>
<td>šom</td>
</tr>
<tr>
<td>دَر</td>
<td>dare</td>
<td>dār</td>
<td>dōr</td>
</tr>
<tr>
<td>دَنْدَان</td>
<td>dāndān</td>
<td>dāndān</td>
<td>dāndān</td>
</tr>
</tbody>
</table>

Key, text 4.
A
B
C

Test 5.
Write the meaning of the following words.

 Sham = __________?

 Dār = __________?

 Dārs = __________?

 Đandān = __________?
Key, test 5.

- supper
- door
- lesson
- tooth

Test 6.

Write the equivalent sound of the following letters

- ر =
- س =
- ش =
- ر =

Key, test 6.

- d
- s
- sh
- r

Read the following words and X the new one.

78 داستان
79 pronounciation shape meaning
    داستان داستان story
80 داستان (داستان) means ________?
81 story
82 The new letter in داستان is:
    initial and medial
    ت
82 Initial medial final isolated
    ت ت ت ت
These variations are all t's.

Exercise 26
Which of the following letters are t's?

A B C D E F G H

Find the correct answer on the next page.

Variation of t's in some words.

Exercise 27
X the t's in the following words.

Key, Exercise 26

Key, Exercise 27

Exercise 28.

Fill in the blanks.

A B C D E F G

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>تاب</td>
<td>دا</td>
<td>تان</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>تاب</td>
<td>دا</td>
</tr>
</tbody>
</table>

A. ت
B. s
Which of the following words has not been presented in this program?

87 نام دان دوست درس

doost

88 pronunciation shape meaning

doost doost friend

89 (doost) means __________?

friend

90 The new letter in doost is the vowel u or the consonant v.

NOTE 3

Some letters in Persian can represent more than one sound like َو that sometimes is pronounced as the vowel u and sometimes is pronounced as the consonant v.

These variations are all v's.

Exercise 29.

Which of the following are v's?

92 A B C D E F G

ت و د و و
Variation of v's in some Persian words.

Exercise 30.

X the v's in the following words.

Exercise 31.

Fill in the blanks

A

B

is pronounced as u or _____?

v
Which of the following words is new?

96 

97 pronunciation shape meaning

toop ball

98 (toop) means ________?

99 The new letter in ________ is a ________?

100 initial medial final isolated

p p p p

101 These variations are all p’s.

102 These variations are all p’s.

Exercise 32

Which of the following letters are p’s?

102

Find the correct answers on the next page.

103 Variation of p’s in some words.

Exercise 33

X the p’s in the following words.

104
Key, Exercise 33

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>key</td>
<td>key</td>
<td>key</td>
</tr>
</tbody>
</table>

Key, Exercise 32

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>key</td>
<td>key</td>
<td>key</td>
</tr>
</tbody>
</table>

Exercise 34

Fill in the blanks

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

Which of the following words has not been represented in this program?

- pool
- money

The difference between the shape of \( \text{p} \) (b) and \( \text{p} \) (p) is ________?

Which of the following words has not been represented in this program?

- pool
- money

108 \( \text{p} \) (pool) means ________?

- money

A. 里程碑
B. 河
The new letter in پژر is ______.

Variation of 1's in some Persian words.

Variation of 1's.

Exercise 35

Which of the following is 1?

Key, Exercise 35

C
G
H

Exercise 36

X the 1's in the following words.
Exercise 36

Fill in the blanks.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A. و
B. ی

Test 7.

Which is the correct pronunciation of the following words?

<table>
<thead>
<tr>
<th>top</th>
<th>toop</th>
<th>tap</th>
</tr>
</thead>
<tbody>
<tr>
<td>doost</td>
<td>dust</td>
<td>dost</td>
</tr>
<tr>
<td>pool</td>
<td>pole</td>
<td>poll</td>
</tr>
<tr>
<td>dastan</td>
<td>dastan</td>
<td>dastan</td>
</tr>
</tbody>
</table>
Key, test 7.

| B | A | A | C |

Test 8.

What is the meaning of the following words?

Write the equivalent sounds of the following letters.

\[
\begin{align*}
\text{بول} &= \rule{2cm}{0.2mm} \\
\text{داستان} &= \rule{2cm}{0.2mm} \\
\text{دوست} &= \rule{2cm}{0.2mm} \\
\text{سوپ} &= \rule{2cm}{0.2mm}
\end{align*}
\]

Key, test 8.

| money | story | friend | ball |

Test 9.

Write the equivalent sounds of the following letters.

\[
\begin{align*}
\text{و} &= \rule{2cm}{0.2mm} \\
\text{ت} &= \rule{2cm}{0.2mm} \\
\text{ل} &= \rule{2cm}{0.2mm} \\
\text{ژ} &= \rule{2cm}{0.2mm}
\end{align*}
\]
115 Which of the following words is new to you?

116 pronunciation shape meaning

havra wra weather

117 (havra) means _________?

weather

118 The new letter in havra is _________?

NOTE 4

Sometimes when e comes at the end of a word, it is pronounced as e.

Variation of h's.

120

Exercise 38

Which of the following letters are h's?

A B C D E F G H

See the correct answers on the next page.

121

Exercise 39

X the h's in the following words.

122 Variation of h's in some words.

Exercise 39

123

-63-
Read the following words and find the new one.

124 داُسَان هوا نوب بَرَف

125 pronounciation  shape  meaning
bَرَف  بَرَف  snow

126 بَرَف (bَرَف) means ____?

127 The new letter in بَرَف (bَرَف) is ____?

128 initial  medial  final  isolated
f  f  f  f

-65-

-66-
Variation of f's.

Exercise 41.
Which of the following letters are f's?

A B C D E F G H

Find the correct answers on the next page.

Variation of f's in some words.

Exercise 42
X the f's in the following words.

A B C D E F G H

Exercise 43
Fill in the blanks

A B C
1 2 3

B bā f
1 2 3

A. f
B. r
Which of the following words is new?

133 بار (پازار باب)

134 pronunciation  shape  meaning

bazaar  بار market

135 (بازار) means _____?

market

136 The new letter in bazaar  بار is _____?

137 initial  medial  final  isolated

z  z  z  z

z  ز  ز  ز

Which of the following letters are z's?

Exercise 44

Which of the following letters are z's?

139 A  B  C  D  E  F  G  H

140 These are variations of z's in some words.

Exercise 45

X the z's in the following words.

141 میز پازار راز زهره زمین
Key, Exercise 44  

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Exercise 46  

Fill in the blanks

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>B</td>
<td>ą</td>
<td>a</td>
<td>z</td>
<td>a</td>
</tr>
</tbody>
</table>

142 The only difference between the shape of ر and ز is _____?
a dot

143 بزاز is a _____ syllable word.
two

144 Which of the following words is new to you?

جوّراب  برف  دوست

جوّراب

145 pronunciation shape meaning
joörab جوّراب sock stocking

146 جوّراب (joörab) means _____?
sock stocking
The new letter in جعوب is ______?

initial | medial | final | isolated
ج | ج | ج | ج

These variations are all j's.

Exercise 47
Which of the following letters is j?

A B C D E F G H
ج ج ج ج ج ج ر

The variation of j's in some words.

جواب ناجح نجاح جاز جان

Exercise 48
X the j's in the following words.

جاءه جالب فرح جواه

Key, Exercise 47

Key, Exercise 48

Exercise 49
Fill in the blanks.

A

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

B

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>j</td>
<td></td>
<td></td>
<td>a</td>
<td>b</td>
</tr>
</tbody>
</table>

A. ج

B. r
Test 10.

What is the correct pronunciation of the following words?

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>بazar</td>
<td>بزار</td>
<td>بزار</td>
<td>بزار</td>
</tr>
<tr>
<td>برف</td>
<td>برف</td>
<td>برف</td>
<td>برف</td>
</tr>
<tr>
<td>جوراب</td>
<td>جوراب</td>
<td>جوراب</td>
<td>جوراب</td>
</tr>
<tr>
<td>هوا</td>
<td>هوا</td>
<td>هوا</td>
<td>هوا</td>
</tr>
</tbody>
</table>

Test 11.

What is the meaning of the following words?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>هوا</td>
<td>= ________?</td>
</tr>
<tr>
<td>جوراب</td>
<td>= ________?</td>
</tr>
<tr>
<td>برف</td>
<td>= ________?</td>
</tr>
<tr>
<td>بazar</td>
<td>= ________?</td>
</tr>
</tbody>
</table>
Key, Test 11.
weather
sock or stocking
snow
market

Test 12.
Write the equivalent sounds of the following letters.

\[\text{ج} = \underline{\text{?}}\]
\[\text{ذ} = \underline{\text{?}}\]
\[\text{ز} = \underline{\text{?}}\]
\[\text{ه} = \underline{\text{?}}\]

Key, Test 12.
\[\text{j}\]
\[\text{f}\]
\[\text{z}\]
\[\text{h-e}\]
### You have mastered these letters in this program.

<table>
<thead>
<tr>
<th>Letter</th>
<th>Arabic Character</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>ا</td>
</tr>
<tr>
<td>b</td>
<td>ب</td>
</tr>
<tr>
<td>m</td>
<td>م</td>
</tr>
<tr>
<td>n</td>
<td>ن</td>
</tr>
<tr>
<td>d</td>
<td>د</td>
</tr>
<tr>
<td>sh</td>
<td>ش</td>
</tr>
<tr>
<td>r</td>
<td>ر</td>
</tr>
<tr>
<td>s</td>
<td>س</td>
</tr>
<tr>
<td>t</td>
<td>ت</td>
</tr>
<tr>
<td>v or u</td>
<td>ع</td>
</tr>
<tr>
<td>p</td>
<td>پ</td>
</tr>
<tr>
<td>l</td>
<td>ل</td>
</tr>
<tr>
<td>h - e</td>
<td>ه - ا</td>
</tr>
<tr>
<td>f</td>
<td>ف</td>
</tr>
<tr>
<td>z</td>
<td>ز</td>
</tr>
<tr>
<td>j</td>
<td>چ</td>
</tr>
</tbody>
</table>

### You have mastered these words in this program.

<table>
<thead>
<tr>
<th>Word</th>
<th>Arabic Word</th>
</tr>
</thead>
<tbody>
<tr>
<td>father</td>
<td>بابا</td>
</tr>
<tr>
<td>mother</td>
<td>ماما</td>
</tr>
<tr>
<td>bread</td>
<td>نان</td>
</tr>
<tr>
<td>name</td>
<td>نام</td>
</tr>
<tr>
<td>tooth</td>
<td>رندان</td>
</tr>
<tr>
<td>supper</td>
<td>نام</td>
</tr>
<tr>
<td>door</td>
<td>در</td>
</tr>
<tr>
<td>lesson</td>
<td>درس</td>
</tr>
<tr>
<td>story</td>
<td>داستان</td>
</tr>
<tr>
<td>friend</td>
<td>دوست</td>
</tr>
<tr>
<td>ball</td>
<td>نوب</td>
</tr>
<tr>
<td>money</td>
<td>پول</td>
</tr>
<tr>
<td>weather</td>
<td>هوا</td>
</tr>
<tr>
<td>snow</td>
<td>برف</td>
</tr>
<tr>
<td>market</td>
<td>بازار</td>
</tr>
<tr>
<td>sock or stocking</td>
<td>جوراب</td>
</tr>
</tbody>
</table>
A CONTEXT PROGRAM IN TEACHING
SOME PERSIAN WORDS AND LETTERS

You are going to learn some Persian words and letters in this program.

In studying the Persian language the learner should remember:

1. Persian is written from right to left.

2. There are no capital letters in Persian.

Mr. Smith: My bā bā (father) is coming from the States the next two weeks.

Mr. Karimi: Is your bā bā (father) coming for a visit to Iran or is he on duty?

Mr. Smith: I believe bā bā (father) wants to visit Iran and some other parts of the Middle East. My bā bā (father) has always been interested in foreign countries.

Mr. Karimi: I admire your learning. I would like to visit foreign countries also.

* a as art, calm

** Some letters have more than one shape in Persian. They are larger in final and isolated position and smaller in initial and medial position. Example:

<table>
<thead>
<tr>
<th>Initial</th>
<th>Medial</th>
<th>Final</th>
<th>Isolated</th>
</tr>
</thead>
<tbody>
<tr>
<td>b</td>
<td>b</td>
<td>b</td>
<td>b</td>
</tr>
</tbody>
</table>

*** In Persian the letter a is made thus
Mr. Karimi: Is your ma ma (mother) coming with your LL?
Mr. Smith: I do not think so. My ma ma (mother) is not very healthy. She enjoys staying home.
Mr. Karimi: Is it safe to leave your ma ma (mother) all alone at home?
Mr. Smith: Oh māmā won't be alone at home because my sister is with her.
Mr. Smith: I think I should tell you that my LL is a very good cook. She bakes a kind of nān (bread) that is very delicious. Everybody who eats a piece of her nān (bread) likes it.
Mr. Karimi: I did not know you bake nān (bread) at home. When I was in the States, they had some ready-made nān (bread) in the grocery store.

Mr. Smith: That is right. You cannot find too many people who bake nān at home.
Mr. Karimi: You told me about your parents, the good LL that your LL bakes, but you did not tell me your sister's nām (name).
Mr. Smith: My sister's nām (name) is Kathy.
Mr. Karimi: We have this nām (name) in Iran too.
Mr. Smith: My sister's nām (name) is taken from my grandmother's LL. I think it is a pretty LL for a girl.

* initial medial
m  
m
** initial medial final isolated
n  
n n n

* final isolated
m  
m
Test 1.

Which one is the correct pronunciation of the following words?

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>44</td>
<td>bā bā</td>
<td>bā be</td>
<td>bō bō</td>
</tr>
<tr>
<td>64</td>
<td>mō mō</td>
<td>mā mā</td>
<td>mē mē</td>
</tr>
<tr>
<td>นอ</td>
<td>nöm</td>
<td>nām</td>
<td>nān</td>
</tr>
<tr>
<td>นอ</td>
<td>näm</td>
<td>nōn</td>
<td>nōd</td>
</tr>
</tbody>
</table>

Key, Test 1.

- A  
- B  
- C  
- A

Test 2.

Write the meaning of the following words.

- มā =  ________ ?
- บābā =  ________ ?
- นām =  ________ ?
- นān =  ________ ?
Test 2.

mother
father
name
bread

Test 3.

Write the equivalent sound of the following letters.

?  = _________?

?  = _________?

?  = _________?

?  = _________?

?  = _________?

-7-

Key, Test 3.

M
N
B
A

-8-
Mr. Smith: I was invited to an Iranian friend's house last night. But I got a **dändan** (tooth) ache and I could not go.

Mr. Karimi: It is too bad you had a **dändan** (tooth) ache. You should have called me to take you to a dentist. I had a bad **dändan** ache last month, so I can feel how bad it is.

Mr. Smith: This **dändan** has given me a lot of problems these last two years. I think I should pull this **dändan** to get rid of it.

Mr. Karimi: You told me about your **dändan** ache and invitation, but you did not tell me what you were invited for.

* 'a as act, bat

** initial medial final isolated

\[
\begin{array}{cccc}
| d | d | d | d | \\
| r | r | r | r |
\end{array}
\]

Mr. Smith: I was invited for **šàm** (supper).

Mr. Karimi: Oh, were you invited for an Iranian **šàm** (supper)?

Mr. Smith: Yes.

Mr. Karimi: It is too bad you could not go. I am sure you would enjoy an Iranian **šàm**. All my American friends like Iranian foods.

Mr. Smith: I am sure I would enjoy the **šàm**. My friend told me he is going to serve me with Chelo Kabab. I am really sorry to miss that **šàm**.

Mr. Smith: Mr. Karimi, you know that I am learning some Persian words.

Mr. Karimi: Yes, I know. What did you learn today?

* sh as shoe, push

** initial medial final isolated

\[
\begin{array}{cccc}
| sh | sh | sh | sh | \\
| š | š | š | š |
\end{array}
\]
Mr. Smith: After learning the word *،امَām،* I learned the word دَارٌ ْDar (door).

Mr. Karimi: The word دَارٌ ْDar (door) is an easy word to learn.

Mr. Smith: It is easy because دَارٌ ْDar (door) and door are close in pronunciation.

Mr. Karimi: If you want to remember the word دَارٌ ْDar (door) or other words that you learn, try to use them daily.

Mr. Smith: For sure I will. Such words as ْDar are easy to remember and to use.

Mr. Karimi: Do you take a دَارٌ ْDar (lesson) in Persian or do you just learn it in your conversations with people? As I remember the last word you had learned was ْDar.

* initial medial final isolated
r ħ r ħ r

** initial medial final isolated
s s s s

Mr. Smith: I have not had a دَارٌ ْDar (lesson) in Persian so far, but I would like to.

Mr. Karimi: If you are interested in taking a دَارٌ ْDar (lesson) in Persian I can take you to one of those classes that teach Persian to those who speak English.

Mr. Smith: Of course I am interested to have Persian دَارٌ ْDar, but I do not have time to go to a class.

Mr. Karimi: It is not a problem. You can get one of the elementary books and get دَارٌ ْDar by yourself. These books give دَارٌ ْDar to beginners.
Test 4.

What is the correct pronunciation of the following words?

A | B | C
---|---|---
داَرِس | دَّوَرِس | دَّارِس
شَام | شَام | شَم
دَّارِ | دَارِ | دَوَر
دَانَّ | دَانَّ | دَانَّ

Key, Test 4.

- A
- B
- B
- C

Test 5.

Write the meaning of the following words.

شَام = ________?
دَرِس = ________?
دَانَّ = ________?
Supper, door, lesson, tooth.

Test 6.
Write the equivalent sound of the following letters.

\( \text{d} = \underline{\text{r}} \) ?

\( \text{s} = \underline{\text{s}} \) ?

\( \text{sh} = \underline{\text{s}} \) ?

\( \text{r} = \underline{\text{r}} \) ?
Mr. Smith: I was reading a book today. It told an old داستان (story) of Iran.

Mr. Karimi: What was the داستان (story) about?

Mr. Smith: It was a داستان (story) of شاهنامه.

Mr. Karimi: شاهنامه is a great book. There is a lot of meaning behind each داستان (story). Some are not easy to understand. One must be familiar with poetry and language of شاهنامه in order to enjoy it.

Mr. Smith: I am very interested to hear an old داستان. Maybe you should tell me some of those stories.

Mr. Karimi: I have a دوست (friend) who tells us a داستان anytime we see him. My دوست (friend) has a very rich background in literature and poetry.

Mr. Smith: Is your دوست (friend) living in Tehran?

Mr. Karimi: Yes he is, but he takes a lot of trips and is rarely available.

Mr. Smith: I would like to visit your دوست (friend). These kinds of people are interesting to be with.

Mr. Karimi: I will call to see if we can get to visit him. My دوست likes to see foreigners, too.

* oo as book, put

** و can represent more than one sound. Sometimes it is pronounced as u and sometimes as the consonant v.

*** final isolated
Mr. Karimi: Are you interested in football?
Mr. Smith: Of course I am.
Mr. Karimi: We are more interested in what you call soccer, but we call it football. I am planning to form a team and to buy a * توپ (ball) for playing football.
Mr. Smith: Do you have a Persian name for football?
Mr. Karimi: No, we have taken this word from English and we use it.
Mr. Smith: You said you are going to buy a * توپ (ball) and form a team. I would like to play in the game, too.
Mr. Karimi: Maybe we can borrow a * توپ from my * روست. He is a football player and I think he has an extra * توپ to lend us.
Mr. Smith: Even if he did not have one we can buy a * توپ to have of our own.
Mr. Smith: We talked about * توپ and it reminds me of Iranian pool بول (money).
I still have a problem with your pool بول (money).
Mr. Karimi: Our pool بول system is easy to learn. I will teach you right now, then you will not get confused with pool بول any more.
Mr. Smith: I went to the bank today to get some بول, but I had a hard time to count the بول. The banker helped me with it.
Test 7.
Which is the correct pronunciation of the following words?

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>top</td>
<td>ðoop</td>
<td>ðap</td>
</tr>
<tr>
<td>doost</td>
<td>dust</td>
<td>ðost</td>
</tr>
<tr>
<td>pool</td>
<td>pole</td>
<td>poll</td>
</tr>
<tr>
<td>dastan</td>
<td>dastan</td>
<td>dastan</td>
</tr>
</tbody>
</table>

Key, Test 7.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>C</td>
</tr>
</tbody>
</table>

Test 8.
What is the meaning of the following words?

بول = ___________?

داستان = ___________?

پول = ___________?

توب = ___________?
Key, Test 8.

money
story
friend
ball

Test 9.

Write the equivalent sound of the following letters.

\[ \text{\( \text{و} \)} = \underline{} ? \]
\[ \text{\( \text{ت} \)} = \underline{} ? \]
\[ \text{\( \text{ل} \)} = \underline{} ? \]
\[ \text{\( \text{پ} \)} = \underline{} ? \]

Mr. Smith: Mr. Karimi, I am planning to go shopping tomorrow morning. But the weatherman said we will have cloudy [havā] (weather) tomorrow and there is a chance of showers. Do you think I can go shopping in such [havā] (weather)?

Mr. Karimi: Of course you can. The havā (هوا) would not be so bad that you have to stay home.

Mr. Smith: How is the havā (هوا) in different parts of Iran? Is it the same as in Tehran?
Mr. Karimi: No, we have different climates in different areas. Some places get very cold. I like the 

Mr. Smith: Before coming to Iran I did not know about the 

Note: Sometimes when * comes at the end of a word it is pronounced as e.

** initial medial final isolated

*f f f f

Mr. Karimi: I know. Some Americans think Iran is a desert, and that we have not seen any 

Mr. Smith: Do you have any 

Mr. Karimi: Yes, we do. If you stay here for the winter you will see it.

Mr. Smith: Where do you think I should go shopping?

Mr. Karimi: It is up to you. But I think if you go to the 

Mr. Smith: Where is the 

* initial medial final isolated

*z z z z
Mr. Karimi: It is in the south of the city. It is a place where you can buy everything you need. Bazaar is covered with a roof and it is an old place. In fog and rain it protects you from getting wet. And it is cool in the summer.

Mr. Smith: I think I have been told about this bazaar. Is it the place where some great businessmen work?

Mr. Karimi: Yes, it is. I will take you to the bazaar tomorrow. I am afraid you will get lost if you go alone.

Mr. Smith: Do you have some shopping to do also?

Mr. Karimi: Not particularly, but when one goes to the bazaar he sees so many different things that he will want to buy something. What do you want to buy?

Mr. Smith: I would like to look at some Persian carpets and to buy some clothing like joorab (sock or stocking), shirts and a pair of shoes.

Mr. Karimi: I can take you to a relative of mine who sells different varieties of joorab (sock or stocking) and other clothing.

Mr. Smith: I appreciate it, but my main interest is looking at some Persian carpets. I can buy joorab and other clothing myself. If you take me to one of those carpet shops I will really appreciate it. I hope I can afford to buy one Persian carpet.

Mr. Karimi: You can buy your joorab and shirt in a short time, then I will take you to some of those carpet shops.
Mr. Smith: You know I have big feet. Sometimes I can hardly find any or shoes to fit me.
Mr. Karimi: Do not worry about that. They have different sizes of and shoes.

Test 10.
What is the correct pronunciation of the following words?

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>مدار</td>
<td>بزار</td>
<td>بزار</td>
<td>بزار</td>
</tr>
<tr>
<td>برف</td>
<td>برف</td>
<td>برف</td>
<td>برف</td>
</tr>
<tr>
<td>جوراب</td>
<td>جوراب</td>
<td>جوراب</td>
<td>جوراب</td>
</tr>
<tr>
<td>هوا</td>
<td>هوا</td>
<td>هوا</td>
<td>have</td>
</tr>
</tbody>
</table>

Test 11.
What is the meaning of the following words?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>هوا</td>
<td>=</td>
</tr>
<tr>
<td>جوراب</td>
<td>=</td>
</tr>
<tr>
<td>برف</td>
<td>=</td>
</tr>
<tr>
<td>بزار</td>
<td>=</td>
</tr>
</tbody>
</table>
Key, Test 11.
weather
sock or stocking
snow
market

Test 12.
Write the equivalent sound of the following letters.

ج = __________?
ف = __________?
ز = __________?
ه = __________?

Key, Test 12.
j
f
z
h-e
You have mastered these letters in this program:

<table>
<thead>
<tr>
<th>a</th>
<th>b</th>
<th>m</th>
<th>n</th>
<th>d</th>
<th>sh</th>
<th>r</th>
<th>s</th>
<th>t</th>
<th>v or u</th>
<th>p</th>
<th>l</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

You have mastered these words in this program:

<table>
<thead>
<tr>
<th>father</th>
<th>mother</th>
<th>bread</th>
<th>name</th>
<th>tooth</th>
<th>supper</th>
<th>door</th>
<th>lesson</th>
<th>story</th>
<th>friend</th>
<th>ball</th>
<th>money</th>
<th>weather</th>
<th>snow</th>
<th>market</th>
<th>sock or stocking</th>
</tr>
</thead>
<tbody>
<tr>
<td>بابا</td>
<td>ماما</td>
<td>نان</td>
<td>نام</td>
<td>دندان</td>
<td>شام</td>
<td>در</td>
<td>درس</td>
<td>داستان</td>
<td>دوست</td>
<td>نوب</td>
<td>پول</td>
<td>هوا</td>
<td>برف</td>
<td>بازار</td>
<td>جوراب</td>
</tr>
</tbody>
</table>
Since the experiment revealed the effectiveness of the context program, this program will be completed in order to present the entire Persian alphabet and some more vocabulary words.

Mr. Smith: Mr. Karimi, I saw your khānom (wife, lady) today and she invited me for at your place. Your khānom (wife) seems to be very nice.

Mr. Karimi: Thank you very much. My khānom was going to invite you to have with us a long time ago, but she was so busy that she couldn't make it. My khānom is a very good cook and most of our friends like her cooking. I hope you will enjoy it, too.

Mr. Smith: I am sure I will. I enjoy being with you and your .

* initial medial final isolated
kh kh kh kh
خ خ خ خ

-1-

-2-
Mr. Smith: Does your have any job besides being a housewife?

Mr. Karimi: Yes, she works as a nazem (superintendent) in a high school.

Mr. Smith: How long has she been a nazem (superintendent)?

Mr. Karimi: It has been about five years.

Mr. Smith: Does one have to have a special degree in order to be a nazem (superintendent) in a high school?

Mr. Karimi: Yes, they must have a bachelor's degree and most of them work as a teacher for a few years before being selected as a nazem (superintendent). A nazem has a great responsibility. She has to take care of students' attendance, their punctuality, the time of classes, and possesses many more duties.

Mr. Smith: Your told me her but I can't remember what it was.

Mr. Karimi: Her name is Zâle (a name for a girl).

Mr. Smith: Oh, I remember now. It is a beautiful name, but I don't know if I can pronounce it properly. Let's see, Zâle (name of a girl).

Mr. Karimi: You are doing it fine. Try it again, Zâle (Zâle).

Mr. Smith: Zâle (Zâle). Mr. Karimi, is Zâle (Zâle) a common name for girls?

Mr. Karimi: Oh, I think so, sort of.

* initial medial final isolated
  z z z
  ž ž ž

ž as "sio" in vision, but not an exact equivalent.
ē as let, set
Mr. Smith: Mr. Karimi, do you have any children?

Mr. Karimi: Yes, we have two children. One of them is seven years old and the other one is a koodāk (baby).

Mr. Smith: That is interesting. I didn't know you had a koodāk (baby).

Mr. Karimi: Yes, our koodāk (koodāk) is six months old. He got his first test last week.

Mr. Smith: You said your ma'ām works as a ma'ām in a high school. Who takes care of your koodāk (koodāk)?

Mr. Karimi: My ma'ām is living with us. She takes care of the koodāk while we are gone.

---

* initial medial final isolated
k k k k

---

Test 13.

What is the correct pronunciation of the following words?

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>nāzem</td>
<td>nāzem</td>
<td>nāzem</td>
</tr>
<tr>
<td>kōōdāk</td>
<td>koodāk</td>
<td>koodāk</td>
</tr>
<tr>
<td>khānām</td>
<td>khānom</td>
<td>khānom</td>
</tr>
<tr>
<td>Zālo</td>
<td>Zēle</td>
<td>Zale</td>
</tr>
</tbody>
</table>
Test 14.

What is the meaning of the following words?

<table>
<thead>
<tr>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>baby</td>
<td>superintendent</td>
</tr>
<tr>
<td>wife</td>
<td>a name for a girl</td>
</tr>
</tbody>
</table>

Test 15.

Write the equivalent sound of the following letters.

<table>
<thead>
<tr>
<th>Letter</th>
<th>Equivalent Sound</th>
</tr>
</thead>
<tbody>
<tr>
<td>ك</td>
<td>كет (ket)</td>
</tr>
<tr>
<td>ناطم</td>
<td>ناطم (natem)</td>
</tr>
<tr>
<td>خانم</td>
<td>خانم (khanam)</td>
</tr>
<tr>
<td>زاله</td>
<td>زاله (zaleh)</td>
</tr>
</tbody>
</table>
Mr. Smith: I like your bağh (garden). It is very beautiful and has a very good location.

Mr. Karimi: Thank you. This bağh (garden) is not mine. I have rented it. But, I have a bağh (garden) in the western part of the city. It is being rented.

Mr. Smith: How come you have rented your own bağh and are staying here? Don't you like yours?

Mr. Karimi: My bağh is old. I like the land, but the building is old. So, my خانم and I decided to rent a place before buying one.

Mr. Smith: Do you think you can buy this baño ?

Mr. Karimi: No, I don't think so. This belongs to a دوست of mine and he doesn't want to sell it. But I am planning to buy a place around this area.
Mr. Smith: Are you going to buy a (big) as this one?

Mr. Karimi: No, I don't think so. I don't have so much and besides that, it is hard to take care of such a (big) place. My house is more concerned about the location of our house than its size. My has a (big) house and he will let us stay there, but I don't like its location.

Mr. Smith: I know what you mean. To take care of a place so (big) needs a lot of time and .

Mr. Karimi: I want to have a place that is enough for my family to be comfortable and happy.

* initial medial final isolated

Note: gh is not an exact equivalent for in English. But, it is usually pronounced as k or q by Americans.

gh as over
Mr. Smith: Mr. Karimi, do you mind if I take an āks عکس (picture) from this table, عدا and your family?

Mr. Karimi: No, not at all. You are welcome to take an āks عکس (picture) of everything that is interesting to you.

Mr. Smith: Thank you. I took this عکس (picture) of بazar the other day and now I would like to take a عکس (picture) of your باغ, خانم, your کودک, and this beautiful table.

Mr. Karimi: I know عکس is the best remembrance that one could have. One of my favorite things is to look at my album.

* initial medial final isolated

<table>
<thead>
<tr>
<th>a</th>
<th>a</th>
<th>a</th>
</tr>
</thead>
</table>

Note: ع does not have exactly the same pronunciation as that was presented in the first lesson.

But, the only letter that could represent it in English is a.

--- Test 16. ---

What is the correct pronunciation of the following words?

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>عکس</td>
<td>exh</td>
<td>āks</td>
</tr>
<tr>
<td>بزرگ</td>
<td>bozorg</td>
<td>bazorg</td>
</tr>
<tr>
<td>عدا</td>
<td>ghaza</td>
<td>ghaza</td>
</tr>
<tr>
<td>باغ</td>
<td>begh</td>
<td>bagh</td>
</tr>
</tbody>
</table>
Test 17.

What is the meaning of the following words?

- bag
- big
- picture
- meal or food

Test 18.

Write the equivalent sound of the following letters.

- ع
- گ
- ع
- ز
Mr. Karimi: Good morning, Mr. Smith.
Mr. Smith: Good morning.
Mr. Karimi: Do you want to take a hammām (بانيوم) (bath) or shower before having your breakfast?
Mr. Smith: Yes, please. I would like to take a hammām (بانيوم) (bath).
Mr. Karimi: Let me take you to the hammam (بانيوم) and we will wait for you.
Mr. Smith: Thank you. You don't have to wait for me. Go ahead and have your breakfast.
Mr. Karimi: Does it take you long to take a hammām (بانيوم)?
Mr. Smith: It will not take me more than a few minutes, but I hate to keep you waiting.
Mr. Karimi: Don't worry, go ahead and take your hammām (بانيوم). I will get the breakfast ready.

* initial medial final isolated
h h h h

- when this mark appears above a letter that letter must be pronounced two times but written once.
Mr. Karimi: Did you have a nice خواب ?
Mr. Smith: Oh yes, I did.

Mr. Karimi: Now I have the sobhan (breakfast) ready. I know you like to have bacon in your sobhan (breakfast). I made it for you.

Mr. Smith: Thank you very much. You have made a براک (table for sobhan (صباح)). You have butter, jam, نان meat, fruit, almost everything. It looks like a بزگ party.

Mr. Karimi: I know you don't care very much about lunch and dinner and your major غذا is your sobhan (صباح). You are right. I can never miss my sobhan. Especially on week days.

Mr. Smith: That is good for you. There is a Proverb that says "one sob (apple) a day keeps the doctor away."

Mr. Karimi: This seems to be a good sob Let me put it in your dish.

Mr. Smith: Oh, it is delicious. It seems that you have different varieties of sob ( سیب ) in Iran.

Mr. Karimi: Yes, we do. We grow almost every kind of fruit here and as you mentioned we have different varieties of سیب with different نام .

* initial medial final isolated
s s s s

Note: ح and ی are two different letters in Persian, but they both have the same equivalent letter in English, h.

* initial medial final isolated
y-i y-i y-i y-i

-20-
Mr. Karimi: Mr. Smith, do you want a cup of coffee or a cup of chây (tea)?

Mr. Smith: I would like to have a cup of chây (tea).

Mr. Karimi: I made coffee because I thought you, as most Americans, prefer coffee.

Mr. Smith: Is chây (چای) your major drink in Iran?

Mr. Karimi: Yes, chây (چای) for us is as coffee for Americans. When we get together, when we are tired and want to have a break, and on different occasions we usually have a cup of chây.

* initial medial final isolated
  ch ch ch ch
ch as in chair, chat.

---

Test 19.
What is the correct pronunciation of the following words?

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>सिब</td>
<td>seab</td>
<td>sub</td>
<td>sib</td>
</tr>
<tr>
<td>جان</td>
<td>chay</td>
<td>chay</td>
<td>chay</td>
</tr>
<tr>
<td>حمام</td>
<td>hammam</td>
<td>haman</td>
<td>hamam</td>
</tr>
<tr>
<td>صبحانه</td>
<td>sobhane</td>
<td>sobhane</td>
<td>sobhane</td>
</tr>
</tbody>
</table>
Key, Test 19.

A
B
A
A

Test 20.

What is the meaning of the following words?

apple
bath
breakfast
tea

Key, Test 20

What is the meaning of the following words?

Write the equivalent sound of the following letters.

\( سبب = \)________?
\( حمام = \)________?
\( صبحه = \)________?
\( جان = \)________?

\( ح = \)________?
\( ج = \)________?
\( ب = \)________?
\( ص = \)________?
Mr. Smith: Mr. Karimi, I went to the market today and saw a ghālee (carpet). I think I am in love with it.

Mr. Karimi: If you liked that ghālee so much, why didn't you buy it?

Mr. Smith: Because I didn't have enough money with me and because I don't know enough about ghālee. I want to take you to see it.

Mr. Karimi: I would like to. I know it is not wise to buy a ghālee without consulting with someone who knows about it.

Mr. Smith: I told the shopkeeper to save that ghālee for me and told him that I would come back in the next few days.

* initial medial final isolated
gh gh gh gh
ق ق ق ق

Note: و and ق represent the same sound in English (gh).
Mr. Karimi: When do you want me to come to see that?
Mr. Smith: Any time, but not today because you look very sick today. What is wrong with you?
Mr. Karimi: I have a cold and I am very sick today. Yesterday the weather was very cold and I didn't feel good. I should have stayed home, but I went to the office and got so sick.
Mr. Smith: If you are so sick why don't you call a doctor?
Mr. Karimi: I think I will stay home today, and if the weather stopped by tomorrow and I still didn't feel better I will go to see my doctor.
Mr. Smith: I hate to see you so sick. Is there anything I can do for you?
Mr. Karimi: No, that is very kind of you. I think I will go to bed and rest.

Mr. Smith: I am glad you are not sick any more and we can go to the store together.
Mr. Karimi: Is it the store you were talking about. Oh, it is beautiful, especially the design at the middle of it.
Mr. Smith: I think this design at the middle has given a special feature to it. There is another that is the same at the middle.
Mr. Karimi: Which one is that? You are right, the design at the middle of both of them is the same. But they have different size and quality.
Mr. Smith: I like this smaller one more, because I think the color at the middle and margins go...

Note: ض، ظ، ذ، ط، ت all have the same equivalent letter in English (z).
together better. If you can think it is desirable and has a good quality I will buy it.

Mr. Karimi: I am sure it is a good one. If you can afford to buy it, don't hesitate.

Note: ُ and ُُُُ both represent the letter (١).

Mr. Smith: I was wondering if the color of this is َََ (stable).

Mr. Karimi: I am sure it is. Most of them have ََََ (stable) color. We can ask the shopkeeper about it.

Mr. Smith: If you think it is َََ (stable) we don't need to ask him. It is so beautiful that I would hate to see it fade.

Mr. Karimi: As I told you, I think its color is ََََ (stable), but you should still keep it away from sunshine.

Mr. Smith: Of course I will. I had a rug that didn't have َََُُِ color and after awhile of being exposed to the sun it lost all its color and beauty.

* initial medial final isolated
    َََ َََ ََََ ََََ

Note: ُُُُِ ََََ ََََ represent the sound (s) in English.
Test 22.

What is the correct pronunciation of the following words?

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>مراز</td>
<td>مزز</td>
<td>ماريز</td>
</tr>
<tr>
<td>قالي</td>
<td>غالي</td>
<td>غالي</td>
</tr>
<tr>
<td>ثابت</td>
<td>سابت</td>
<td>سابت</td>
</tr>
<tr>
<td>وسط</td>
<td>وساط</td>
<td>وساط</td>
</tr>
</tbody>
</table>

Key, Test 22.

C
B
C
A

Test 23.

What is the meaning of the following words?

مریض =  

ثابت =  

قالی =  

وسط =  

0
Key, Test 23.

sick
stable
carpet
middle

Test 24.

Write the equivalent sound of the following letters.

\[ \text{ت} = \underline{\text{?}} \]

\[ \text{ق} = \underline{\text{?}} \]

\[ \text{ط} = \underline{\text{?}} \]

\[ \text{ض} = \underline{\text{?}} \]
Now you have mastered the entire Persian alphabet. The letters that you learned in this part of the program are as follows:

<table>
<thead>
<tr>
<th>Letter</th>
<th>Persian</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>t</td>
<td>تا</td>
<td>stable</td>
</tr>
<tr>
<td>s</td>
<td>س</td>
<td>middle</td>
</tr>
<tr>
<td>kh</td>
<td>خ.</td>
<td>lady - wife</td>
</tr>
<tr>
<td>z</td>
<td>ز</td>
<td>superintendent</td>
</tr>
<tr>
<td>ž</td>
<td>ح.</td>
<td>name for a girl</td>
</tr>
<tr>
<td>k</td>
<td>ک</td>
<td>garden</td>
</tr>
<tr>
<td>gh</td>
<td>گ.</td>
<td>big</td>
</tr>
<tr>
<td>g</td>
<td>گ</td>
<td>picture</td>
</tr>
<tr>
<td>z</td>
<td>ز</td>
<td>meal, food</td>
</tr>
<tr>
<td>a</td>
<td>آ</td>
<td>apple</td>
</tr>
<tr>
<td>h</td>
<td>ه</td>
<td>bath</td>
</tr>
<tr>
<td>s</td>
<td>س</td>
<td>breakfast</td>
</tr>
<tr>
<td>y-i</td>
<td>ی-ی</td>
<td>tea</td>
</tr>
<tr>
<td>ch</td>
<td>چ</td>
<td>sick</td>
</tr>
<tr>
<td>gh</td>
<td>گ.</td>
<td>carpet</td>
</tr>
<tr>
<td>z</td>
<td>ز</td>
<td>baby</td>
</tr>
</tbody>
</table>

You have mastered the following words:

stable
middle
lady - wife
superintendent
name for a girl
garden
big
picture
meal, food
apple
bath
breakfast
tea
sick
carpet
baby
Appendix D

Post-tests

Write the meaning of the following Persian Words:

1. درس

One can get a lot of experience and آگاهی by travelling. When you go to a foreign country there will be some problems. One of the problems is the familiarity with پول. I remember one day I went to شانزدایپارازار with my پایگاه. We were going to buy some clothing, like shirts, hats, a pair of جوراب and a سوپ for my little brother. We had a hard time finding our way home. If we had not seen our Iranian دوست we would have been lost.

Another time I got a bad ناکی and was going to see a dentist. I went to the man who was in charge of the hotel. He called a dentist and made an appointment for me. He gave me the نام and address of the dentist. The برف was very cold and برزین had covered everything, but I had to go. So I took a taxi and went to the dentist.

You have a wonderful experience when you eat different foods. We were invited to a family one night for شام. We did not know how to eat that food, because it was the first time we saw it. In some nations when you go to a home they do a lot of greeting to welcome you at the در. We did not know their custom and were confused about what we were supposed to say. I saw a kind of نان on the table that I had never seen before. My trip to foreign countries has been so راستان interesting to me that I am going to make a راستان out of it.

1 - ____________________________ 5 - ____________________________
2 - ____________________________ 6 - ____________________________
3 - ____________________________ 7 - ____________________________
4 - ____________________________ 8 - ____________________________
Circle the correct pronunciation of the following words:

1. هوا  
   A: ḥāva  
   B: ḥāva  
   C: ḥāva  
   D: ḥāva

2. بابا  
   A: bā bā  
   B: bā bā  
   C: bō bō  
   D: bā bā

3. جوهراب  
   A: joorāb  
   B: joorāb  
   C: joorāb  
   D: joorāb

4. ماما  
   A: ma ma  
   B: me me  
   C: mō mō  
   D: mā mā

5. برف  
   A: barf  
   B: barf  
   C: barf  
   D: bōrf

6. بazar  
   A: bāzār  
   B: bazār  
   C: bazār  
   D: bezār

7. درس  
   A: dārs  
   B: dārs  
   C: dārs  
   D: dōrs

8. نان  
   A: nān  
   B: nōn  
   C: nēn  
   D: nān

9. نام  
   A: nām  
   B: nām  
   C: nām  
   D: nem

10. پوئل  
    A: poel  
    B: peel  
    C: pool  
    D: pool

11. شام  
    A: shēm  
    B: shām  
    C: shōm  
    D: shām

12. در  
    A: dār  
    B: dār  
    C: dār  
    D: dōr

13. داستان  
    A: dāstān  
    B: dāstān  
    C: dāstān  
    D: destān

14. توب  
    A: top  
    B: toop  
    C: tap  
    D: tap

15. دوست  
    A: deest  
    B: doost  
    C: dāst  
    D: dest

16. دندان  
    A: dāndān  
    B: dāndān  
    C: dāndān  
    D: dandān
List Meaning Test
Write the meaning of the following words.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ماما</td>
</tr>
<tr>
<td>2</td>
<td>جواب</td>
</tr>
<tr>
<td>3</td>
<td>نان</td>
</tr>
<tr>
<td>4</td>
<td>در</td>
</tr>
<tr>
<td>5</td>
<td>نام</td>
</tr>
<tr>
<td>6</td>
<td>دندان</td>
</tr>
<tr>
<td>7</td>
<td>درس</td>
</tr>
<tr>
<td>8</td>
<td>هوا</td>
</tr>
<tr>
<td>9</td>
<td>پول</td>
</tr>
<tr>
<td>10</td>
<td>داستان</td>
</tr>
<tr>
<td>11</td>
<td>برف</td>
</tr>
<tr>
<td>12</td>
<td>بازار</td>
</tr>
<tr>
<td>13</td>
<td>نوب</td>
</tr>
<tr>
<td>14</td>
<td>شام</td>
</tr>
<tr>
<td>15</td>
<td>بابا</td>
</tr>
<tr>
<td>16</td>
<td>دوست</td>
</tr>
</tbody>
</table>