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TEACHING ADULTS VIA TELE-LECTURE AND ELECTROWRITER (VICTOR
ELECTRONIC REMOTE BLACKBOARD). FINAL REPORT.
BY- EDELMAN, LILY
BNAI BRITH, WASHINGTON,D.C., COMM. ON ADULT EDUC.
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DESCRIPTORS- *TELEPHONE INSTRUCTION, *ELECTRONIC EQUIPMENT,
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EDUCATIONAL EXPERIMENTS, COMPARATIVE ANALYSIS, LANGUAGE
INSTRUCTION, EXPERIMENTAL GROUPS, CONTROL GROUPS,
TELE-LECTURE, ELECTROWRITER,

     THIS PROJECT TESTED WHETHER THE TELE-LECTURE AND
ELECTROWRITER COULD (1) BE USED EFFECTIVELY FOR THE
SIMULTANEOUS INSTRUCTION OF ADULTS IN MULTIPLE REMOTE AREAS,
AND (2) USED BY A MASTER TEACHER TO PROVIDE LEARNING
EXPERIENCE FOR ADULTS WHICH IS AT LEAST AS EFFECTIVE AS
FACE-TO-FACE INSTRUCTION. UTILIZING AMPLIFICATION AND
MICROPHONE TRANSMISSION DEVICES BY TELEPHONE INSTALLATION,
TELE-LECTURE MAKES IT POSSIBLE FOR GROUPS AT EACH LOCATION TO
HEAR AND ENGAGE IN DISCUSSION WITH SIMILAR GROUPS AT ALL
OTHER LOCATIONS HOOKED INTO THE NETWORK. THE ELECTROWRITER
PERMITS THE TRANSMISSION BY TELEPHONE OF WRITING IMPRESSIONS
WHICH ARE PROJECTED ONTO A SCREEN BY A SPECIALLY DESIGNED
OVERHEAD PROJECTOR CONNECTED TO A RECEIVER. DAVID WEINSTEIN,
THE "MASTER" TEACHER IN CHICAGO TAUGHT HEBREW SIMULTANEOUSLY
TO TELE-LECTURE GROUPS IN GRAND RAPIDS AND EAST LANSING,
MICHIGAN, AND TO THE "LIVE" CONTROL GROUP IN CHICAGO FOR NINE
CLASS SESSIONS OF 1 HOUR EACH. EACH OF THE EXPERIMENTAL
CLASSES WAS ORIGINALLY MADE UP OF A MINIMUM OF 20 STUDENTS
WHO HAD NO PRIOR KNOWLEDGE OF HOW TO READ OR WRITE HEBREW. A
SIMILAR CONTROL GROUP ORIGINALLY HAD 40 STUDENTS. AN ANALYSIS
OF SCORES ON A MIDTERM AND A FINAL EXAMINATION, AND ON AN
ORAL READING TEST INDICATED NO SIGNIFICANT DIFFERENCES
BETWEEN PERFORMANCES OF THE THREE GROUPS. THE PRESENCE OR
ABSENCE OF THE INSTRUCTOR FROM THE CLASSROOM DID NOT AFFECT
THE PERFORMANCE ON ANY OF THE CRITERIA. (PS)

ED016081

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TEACHING ADULTS VIA TELE-LECTURE AND

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REMOTE BLACKBOARD)

May 1967

U. S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE

Office of Education

Bureau of Research

TEACHING ADULTS VIA TELE-LECTURE
AND ELECTROWRITER (VICTOR
ELECTRONIC REMOTE BLACKBOARD)

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Lily Edelman, Director

B'nai B'rith Commission on Adult Jewish Education

May 1967

Commission on Adult Jewish Education, B'nai B'rith
Washington, D. C.

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INTRODUCTION

The adult education "explosion" which is now part and parcel
of the American scene has brought in its wake the problem that
bedevils all levels of education: a crisis in qualified teaching
personnel. Teachers possessing qualities of clarity, empathy,
energy, enthusiasm, in addition to knowledge and competence, are
essential if maximum learning is to take place. 1 The success
on television in the recent past of "master teachers" like
conductor Leonard Bernstein, cellist Pablo Casals and Shakespeare
scholar Frank Baxter is no accident.

Shortage of Teachers of Adults

Unfortunately, such gifted, radiant personalities capable of
opening up new horizons, communicating new skills and insights are
rare. The adult teacher is all too frequently a part-time
employee taking on classes on the fringes of other working commit-
ments; or he is a volunteer neither specifically trained in the
subject matter nor experienced in handling the diverse motiva-
tions which bring adults into any given classroom or more informal
setting. Then, too, large numbers of autonomous study groups are
totally unable to offer teachers any financial compensation
whatsoever.

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1. See Teaching Styles and Learning (by David Solomon, William
   F. Bezdek, Larry Rosenberg. Center for the Study of Liberal
   Education for Adults, Chicago, 1963).

1

The problem of teacher shortages is further aggravated in smaller communities isolated from larger urban centers. For adults thus disadvantaged geographically, the problem of securing qualified teachers is almost insoluble. A study conducted in 1962 by the National Opinion Research Center at the University of Chicago, after revealing that people living in "small cities, small towns and rural areas are under-represented" in adult classes, concludes that "adult education is mainly an urban and suburban phenomenon." 1 This leads inevitably to "the disturbing fact that in our society, where education is generally highly valued, those who 'need' education most often participate the least." 2 "To a very large extent, present adult education programs are educating the educated." 3 The necessity to discover ways and means to teach adult groups widely scattered geographically is therefore a crucial responsibility. John Gardner's theme in Self-Renewal The Individual and the Innovative Society (Harper and Row, 1964) is our need to make it possible for individuals everywhere to renew themselves. Inevitably, this involves "sharing the wealth" as far as teachers for adult education are concerned.

Need to Explore New Communications Media

Given the shortages of qualified teaching personnel, exploration of methods to break the communications barrier is a necessity. "Despite the theoretical affinity between adult education and communication," however, Dr. Burton Kreitlow finds a shocking lack of "traffic between the two." 4

1. John W. C. Johnstone, Volunteers for Learning: A Study of the Educational Pursuits of American Adults, Report 89, NORC, Chicago, pp. 80, 136.

2. Corinne Kirchner, "Motivation to Learn," An Overview of Adult Education Research, AEA of USA, 1959, p. 33.

3. John Newberry, "Participants and Participation in Adult Education," ibid., p. 116.

4. Educating the Adult Educator (Part I: Concepts for the Curriculum, March 1965), p. 10. This is a pamphlet summarizing the adult education concerns of four major institutions -- U.S. Office of Education, Adult Education Association, Federal Extension Service, and University of Wisconsin.

A body of literature already exists to document the value of audio-visual devices and techniques in adult education. Films and filmstrips, radio, television and teaching machines have all been used, with varying degrees of success. 1

Much more remains to be done. Theodore Pinnock points out that "in general, media studies have dealt most with controlled groups such as classroom students and army personnel" and that "communications studies with independent adult groups are rare." What is clearly needed is additional research "in the area of communications media -- media that can effectively transmit to large numbers of people knowledge which is essential for them to know. Researchers have not found the answer in any one medium or combination thereof up to the present..." 2

The time is ripe for retooling, for finding new methods, for engaging in bold new experimentation, utilizing the newest technological advances in electronic communications media. "The seedlings of new ideas and new ways that will shape the future" — to borrow John Gardner's felicitous phrase -- is what adult educators must be after. In and address to the Conference on Methods and Objectives of Research in Adult Education in 1961, Cyril Houle called adult education "a dark continent" which can be illuminated only by "largeness of conception and freshness of approach." 3

In a discussion of "Instruments and Media of Instruction" A. A. Lumsdaine expresses the optimistic hope that the use of new teaching devices "may represent the most important innovation in education since the advent of the textbook." 4

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1. An entire section of chapter on "Methods and Techniques of Adult Education" is devoted to "Audio-Visual Aids" in An Overview of Adult Education Research, pp. 152-162.

2. A Comparison of the Effectiveness of Film and Bulletin in Transmitting Knowledge to Negro 4-H Club Local Leaders in Alabama and Caucasian 4-H Club Local Leaders in Wisconsin, Doctoral Dissertation, University of Wisconsin, p. 4.

3. Reprinted in Adult Education, Summer, 1962.

4. In Handbook of Research on Teaching (N. L. Gage, Editor), Rand McNally and Co., 1963, p. 592.

It is the use of two such new electronic teaching devices --
Tele-Lecture 1 and Electrowriter 2 -- which our project selected
to explore.

Teaching Adults via Tele-Lecture and Electrowriter

This project in communications was conducted by B'nai B'rith
Commission on Adult Jewish Education in cooperation with the
Bureau of Research, Health, Education and Welfare, through the
facilities of Michigan State University.

The key question which the project set out to answer is:

> Can Tele-Lecture and Electrowriter be utilized
> to make instruction by a single master teacher
> available simultaneously to groups of adults in
> multiple and far-flung communities?

> Specifically, can these electronic devices be
> used in the teaching of Hebrew reading and
> writing?

Some Background Information

During the past two and one-half years preceding the start
of this project in early 1967, B'nai B'rith, an international
service organization with a far-flung membership in remote areas
as well as in cities, conducted six pilot projects in the field
of mass communications via electronic devices. Five involved
pioneering the use of Tele-Lecture for multi-way group
discussion in cooperation with the American Telephone and
Telegraph Company.

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1. Utilizing amplification and microphone transmission devices
   by telephone installation at each station, Tele-Lecture
   makes it possible for groups at each location to hear and
   engage in discussion with similiar groups at all other
   locations hooked into the network.

2. The Electrowriter consists of two elements -- the transmitter
   and the receiver -- which are physically and geographically
   separated but are linked by telephone. The transmitter con-
   sists of a writing pad and stylus, the latter picking up
   electronic impulses which are transmitted by telephone con-
   nection to the receiver. The receiver consists of a writing
   pad and electronically controlled stylus; the impressions
   are instantaneously received and projected onto the screen
   by a specially designed overhead projector which is con-
   nected to the receiver.

A sixth project was conducted in November, 1965, which utilized for the first time an educational system combining a master teacher instructing adults via Tele-Lecture and the Victor Electrowriter Remote Blackboard, manufactured by the Victor Comptometer Corporation. The teacher was in Chicago, with a live class, and his instruction was received via Tele-Lecture and VERB classes in New York City and Arlington, Virginia.

Research Questions Explored

The project described on the following pages sought to test, under scientifically controlled research conditions, the wider use of the combined Tele-Lecture and Electrowriter and their applicability for the simultaneous teaching of specific skills by a master teacher to groups of adults in geographically separated locations. In entering this area of communications research, the project tested the validity of the following research questions:

a) Can Tele-Lecture and Electrowriter be used effectively for the simultaneous instruction of adults in multiple remote areas?

> The accumulated experience of B'nai B'rith's pilot projects had demonstrated that adults can be taught successfully by Tele-Lecture and Electrowriter. The present project proposed to explore further under controlled test conditions the amount and degree of learning which takes place in two groups taught by Tele-Lecture and Electrowriter, as compared with the amount and degree of learning which takes place in a control group taught face-to-face.

b) Can Tele-Lecture and Electrowriter used by a master teacher, who combines unusual teaching ability, training in his field and extensive teaching experience, provide learning experience for adults which is at least as effective as face-to-face instruction?

> In evaluating the effectiveness of television teaching as compared with face-to-face instruction, the Ford Foundation's Fund for the Advancement of Teaching reported little or no significant difference in the

achievement of students in television classes and comparable students in regular classes. [1] Harry Miller is even more emphatic: he states that available studies comparing live and television teaching prove overwhelmingly that "it does not matter a bit. The statistician's formula of 'no significant difference' is the verdict of so many studies which contrast the results of a televised class and a live class taught by the same instructor that the refrain gets boring." [2]

What is abundantly clear is that electronic devices are not enough in themsleves; the services of a master teacher are indispensable. The Ford Foundation report cited above attributed its finding that there is no difference between achievement in live and television classes mainly to the fact that "superior teaching is available over television."[3] Television teachers are carefully selected for their superiority and undoubtedly spend a great deal more time preparing to teach their large and scattered audience than does the average classroom teacher.

The selection of a most able and gifted master teacher, therefore, was a built-in imperative of the project. Dr. David Weinstein, whose qualifications are described in Appendix A, admirably filled these requirements.

In order also to provide additional data for purposes of evaluating how much of the personality of a master teacher comes through via electronic devices, the project design also included a class taught "live" by Dr. Weinstein.

A related premise, which this project did not test but on which it is based, is that instruction via Tele-Lecture and Electrowriter is in complete harmony with the following major principles of adult learning: that adults learn best when the participants are actively involved in the instruction process; and that adults learn best in groups.

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1. Teaching by Television, Ford Foundation, Office of Reports, New York, unpublished.

2. Teaching and Learning in Adult Education, Macmillan, 1964. p. 272.

3. Ibid.

A cardinal rule of adult learning, as itemized
by John Anderson, 1 is that "learning is more
rapid and efficient when the learner is a
participant rather than simply a spectator."
In fact, the major deficiency in television
teaching is its failure thus far to provide
such participation on the part of viewers.
While highly effective for what Miller calls
"a one-way communication flow" from the
teacher to the student,2 the absence of op-
portunities for student response and involve-
ment is a serious flaw.

It is this lack which Tele-Lecture and Electro-
writer were thought equipped to overcome: the
former by offering opportunities for pupil-
teacher interchange and discussion, and the
second by making it possible for students to
"write back" electronically for correction by
the teacher and fellow students.

That "group learning is better, i.e., more ef-
fective, than individual learning" is another
principle of adult learning cited by Anderson. 3
Since Tele-Lecture and Electrowriter are de-
signed exclusively for the teaching of groups,
they were considered to have a distinct
advantage over television in this area.

1. In chapter on "Teaching and Learning," Education for
    Later Maturity, Morrow, 1956.

2. Op. cit., p. 274.

3. Op. cit., p. 274.

METHOD

Organization of Project

Dr. David Weinstein, the "master" teacher, based in Chicago, taught via Tele-Lecture and Electrowriter two classes set up in the following locations:

a. Place: Michigan State University, East Lansing,
             Michigan, Engineering Building, Room 232

    Time: 8:30-9:30 (Eastern Standard Time)

b. Place: Michigan State University Regional Center,
             Grand Rapids, Michigan
             Grand Rapids Junior College, West Building
             111 Division Avenue, North, Room 111

    Time: 8:30-9:30 (Eastern Standard Time)

Dr. Weinstein simultaneously taught one "live" control group in Chicago at the College of Jewish Studies; 7:30 pm-8:30 (Central Standard Time).

Each class was originally made up of a minimum of twenty students, including older and younger persons, male and female, and who had no prior knowledge of how to read or write Hebrew. The control group originally had forty students.

NOTE: Each student admitted to the classes had to agree to participate for a full ten weeks, one night each week (Thursday) for approximately one hour, from the first week in January through the second week in March, 1967. Because of a snowstorm, only nine sessions were held, two of which were devoted to testing.

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Text Materials

The text materials used in this project (copies were made available to every student) were:

(1) First Steps in Reading Hebrew by I. A. Richards, David Weinstein, Christine Gibson (Washington Square)

(2) Chart depicting correct cursive form of each letter in Hebrew alphabet

(3) Hebrew notebook

At the end of the eight sessions Parts I and II of First Steps, which are complete units in themselves, were covered.

Teaching Method

Since a technological advance in education needs to be built upon instructional methods and materials that can be effective, the teaching methods used by the master teacher, Dr. Weinstein, were an outgrowth of those developed by Professors I. A. Richards and Christine Gibson of Harvard University's Graduate School of Education, which have been used with a high degree of success in many language projects in various parts of the world. The method was based on several well-established premises of language instruction, developed and tested over the years by Language Research, Inc., a non-profit educational body incorporated in the State of Massachusetts for the support of educational research in the fields of literacy and elementary language learning. Although the oral mastery of these materials should ordinarily precede the teaching of reading and writing skills, no attempt was made here to follow this procedure fully because of the limitations of this project and its emphasis on testing the equipment. Specifically, the ideal method is based on the slow intake of letters and words, and limited syntax patterns and vocabulary in meaningful contexts. However, in this project all that was used was the slow intake of letters and words.

Evaluation

Dr. Kenneth Greenberg, the psychologist who devised the tests for this project (see appendix), provided for a detailed evaluation of this project.

The following tests of achievement were made:

1. Oral reading (mechanical) -- tested by means of a series of sentences based on the content of instruction. The responses of the students were recorded on tapes, and these tapes were evaluated for:

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a. pronunciation
   b. fluency
   c. correctness

2. Sight reading - identification of printed Hebrew
   in the text and for Electronic Blackboard.

RESULTS

Data gathered for the study consisted of several demo-
graphic variables and three objective criteria. From the
demographic data the sample can be described in modal or
average terms. The group was predominately female (77%), the
median age was 30, they had accomplished some graduate study,
and a second language was not spoken in the home. They had
studied at least one foreign language during their formal
schooling for a period of a little more than one year.

The objective criteria were scores on a midterm examina-
tion, a final examination, and an oral reading test. The
examinations were the usual type of teacher-made tests
developed by the psychological consultant and the course in-
structor. The midterm consisted of 60 items, the final examina-
tion contained 100 items, and the oral reading test consisted
of words, phrases and sentences taken from the Hebrew text
and read aloud into a tape recorder. The midterm and final
examination were scored for number correct and the oral reading
test was scored for the number of errors. Results were not
reported for students who missed either the midterm or final
examination. Criterion results are shown on the next page in
Table I for each of the three groups and for the total group.

TABLE 1

Statistical Descriptions of Criterion Performance
Classified by Location and for Total Group

Location	Mid-Term			Final			Error		
	N	X	S.D.	N	X	S.D.	N	X	S.D.
Chicago	26	56.8	5.5	29	95.2	7.3	27	3.2	5.8
E. Lansing	16	57.8	2.4	16	96.3	5.2	16	5.9	9.8
Grand Rapids	18	57.3	5.5	18	96.1	5.5	18	5.3	3.6
Total	60	57.25	4.6	63	95.7	6.2	61	4.4	6.6

Inspection of the data presented in the table shows the high
degree of similarity of all groups for each of the mean criterion
performances. However, the variation wit'in the groups, when
tested for homogeneity, was found to be significant at the 5
percent level of probability for the midterm scores and the
Reading Error scores. Frequency distributions of the data are
found in Appendix B, attached. By inspection of these data it is
seen that the differences are accounted for by a very few scores:
i.e. in the midterm results, one score of 40 was earned in Grand
Rapids, and four below 50 were earned in Chicago. All other
scores were 55 or above. In the case of Reading, error scores of
21, 17, and 12 were made in Grand Rapids, 17 in Chicago and 42 in
East Lansing. All other scores were 10 or less.

The t-test was the statistical technique used to test the
hypothesis of no significant differences among all mean criterion
performances. Each pair of means was tested. The results are
shown in Table 2 (see next page).

TABLE 2

Values of "t" of Significant Mean Difference
Comparisons for Three Groups in Three Criteria

Criterion	Comparisons*		
	1-2	2-3	1-3
Midterm Scores	.386	.781	.052
Final Scores	.141	.585	.464
Reading Error Scores	2.14	1.05	1.55

1 = Grand Rapids   2 = East Lansing   3 = Chicago

No comparisons were significantly different at the 5 percent
level of probability. Thus, it is concluded that the mean
criterion results are not different among the three groups of
subjects.

The demographic information was collected by means of a
questionnaire in a copy which is attached as Appendix C. Data
for six of these items were extracted from the questionnaire
for the purpose of analysis to see if they would differentiate
the criterion performances. These variables were sex, age, school
grade completed, other language spoken at home, number of other
languages studied, and total years of such study. Occupation was
also noted. Summaries of these data appear in attached
Appendix D.

Possible differentiation was analyzed statistically for the
total group by the analysis of variance technique for the first
four variables listed above, and by the chi-square technique for
the remaining two. The results of the analyses are given in
Table 3.

TABLE 3

F-Values and Chi-Square Values Obtained
From Data Analysis

| | | F-Value | | | | |
Variable	D.F.	Mid-Term	d.f.	Final	d.f.	Reading Error
Sex	1,58	1.761	1,61	57.721*	1,59	36.564*
Age	5,54	2.958	5,57	1.523	5,56	2.223
Grade Completed	2,53	.4273	2,57	.484	2,54	1.7033
Other Language at Home	1,58	.4008	1,60	.1632	1,59	.0783
		Chi Square				
Number of other languages studied	9	3.6121	18	17.3516	9	7.3093
Total Years of Such Study	6	5.1153	12	9.5338	6	7.6790

These data show that all criterion performance were not differentiated by any of the demographic variables with the exception of the sex of the subjects in terms of reading errors and final scores. On these two criteria, males performed significantly poorer than did females as evidenced by the mean for males (94.71) and for females (96.02) on the final examination; and by the mean reading errors for males (9.62) and for females (2.98)**. These sex differences must take into consideration the unequal number of males and females in the study and should, therefore, not be over-interpreted.

*Significan, P≠ .01

** Significant, P   .01

DISCUSSION

This study has dealt with the need to determine whether
the use of the Tele-Lecture and Electrowriter in conjunction with
a master teacher can be an effective means of teaching Hebrew
simultaneously to groups in different cities. The null
hypothesis that was established was that there would be no
significant differences between the achievement of the groups in
Grand Rapids and East Lansing, Michigan, and the achievement of
the group in Chicago, where the instruction originated.

Analysis of the data reported from demographic data and
three objective criterion indicate that the null hypothesis
cannot be rejected. No significant differences were found
between performances of the three groups of subjects who were
taught Hebrew under the conditions indicated. The presence or
absence of the instructor from the classroom did not affect
the performance of any of the criteria and it must be inferred
that the Tele-Lecture and Electrowriter technique of teaching the
material was as successful for students in East Lansing and
Grand Rapids as was the usual classroom method for students in
Chicago.

Six relevant variables were examined and compared. These
include: (1) sex differences, (2) age differences, (3) educational
levels, (4) other languages spoken in the home, (5) number of
other languages studied, and (6) total years of languages studied.
Of these six variables, only one showed significant difference in
the final examination and reading error criteria. This variable

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was sex, but the number of male and female subjects in the study was of such great disparity that caution should be regarded in making a definitive statement about the significance that appeared.

In an attempt to gain information as to the subjective aspect of the group attitudes towards the technique, students were observed for restlessness and noise. No differences between the three groups were found which would suggest that there is no reason to feel that the technique of Tele-Lecture and Electro-writer need result in greater distraction or restlessness. Monitor checks during each 15 minute segment of the class reveal no differences between the three groups. It is important to note, however, that two variables are critical for such a condition to exist. The first details with the motivation of the student, the second with the expertise of the instructor.

There is reason to feel that the motivation of each group was such that members had internal incentives to attain the objectives of the course. This is inferred from the fact that the course was voluntary, the attendence was good, it was held in the evening, and the comments from the monitors in each of the three locations indicated a good response and high level of interest. Groups became cohesive and wanted to continue beyond the designated limits of the course. It is also noted that approximately 50% of those students who indicated their own re-ligious background were non-Jewish. Represented in the groups were Roman Catholics, Protestants, Baptists, Congregationalists, and a member of the United Church of Christ.

The second point, that of the effectiveness of the instructor, is one that is viewed as a critical factor in the success of any teaching program. The master teacher selected for this study was very successful in gaining the interest and enthusiasm of the groups. From tapes which were heard, it is apparent that he was able to generate a high level of motivation with both his pre-sentation and the organization of his material. This study utilized a program that was geared for the use of such techniques as Tele-Lecture and Electrowriter. It is almost certain that this factor was instrumental in the effectiveness of the teaching method. All courses might not lend themselves to the use of the technique outlined in this study.

It is interesting to note that some students from the groups outside of Chicago indicated an interest to see the instructor, or at least a picture of the instructor. It might be hypothesized that the presence of the instructor in the classroom might add an intrinsic or aesthetic variable to the situation, but that this variable would not effect the achievement of the group.

The limitations of this study would be seen in the small numbers of each group and the disparity between males and females. It is difficult to equate intellectual differences and differences of age. One might speculate that the commitment to study would be greater for the young student who is not too far removed from an academic setting than it would be for the housewife or otherwise employed adult. In short, the groups studied were heterogeneous and their actual involvement in outside study cannot be determined. It would be unfair to use the criteria and standards established for college courses for groups that are non-credit, adult education type courses.

Another limitation of this study would be in terms of the length of the course. By virtue of the fact that the course ran only 10 weeks, greater instructional achievement could not have been expected. Although each student had a workbook and was expected to complete assignments, in a beginning course of such short duration a longer period of time would be desirable.

The results of this study would, however, corroborate the research of Universities utilizing television teaching techniques in that the presence of the instructor in the room is not an essential variable to the learning ability of the class. His presence may have intrinsic or aesthetic value, but one that does not affect learning.

One variable that this technique of teaching does introduce that could be problematic is that of management and use of equipment. Depending upon the line circuits, interference and poor reception are a possibility, and a breakdown in the use of the Electrowriter is likewise possible. It is therefore essential that either a qualified technician be available or the monitor or person in charge be knowledgeable about the equipment. An equipment breakdown of the Electrowriter did occur during one of the sessions which resulted in the discontinuation of all writing to any of the groups.

CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

From the analysis of data presented in this study, it can be categorically stated succinctly that the use of Tele-Lecture and Electrowriter as a method of teaching simultaneously to groups in different cities seems as successful as the usual method of classroom teaching.

The null hypothesis that stated that there was no significant differences between the three groups for the criterion selected can not be rejected

A statistical design using the t-test for comparison of means of the criterion and an analysis of variance (F test) and Chi-Square technique for the demographic data was used.

The implication of this study is that with an adult group of students who are at the same initial level of knowledge about the subject, the technique of Tele-Lecture and Telewriter in combination with a master teacher is an effective method of simultaneous instruction in different cities. When compared with the results of scores obtained by the group that heard and saw the instructor, no significant differences were observed.

Further implications include the desirability of using this method of instruction in geographically disadvantaged rural areas where the shortage of competent teachers if felt. From both an economical and practical point, it is advantageous

to consider a method of instruction that would conserve on the
time demands of an instructor and make instruction available
to multiple groups simultaneously. Equipment rental is consider-
ably less than the cost of transportational and instructional
costs of a person. Such a system where both the instructor and
student can communicate via Tele-Lecture adds an individualized
dimension to the instruction and personalizes it as well.

Recommendations

The success of the combined use of Tele-Lecture and VERB in
creating a classroom atmosphere and in sustaining student interest
and attendance further supports the premise that two-way communica-
tion can be provided by instruction via electronic audio-visual
devices. Tele-Lecture makes it possible for two-way speech
communication while VERB introduces the visual ingredient and the
possibility for students to "write back."

What is still lacking is the visual aspect -- being able to
see the teacher and the students in the "live" class. This
ability would provide opportunities for more varied techniques
in the teaching of language, such as pantomime, dialogue, drama-
tization, etc. For this reason, it is recommended that tele-
vision be introduced and utilized in combination with Tel-Lecture
and VERB. This combination would offer the most complete
"multi-media" (Marshall McLuhan's now famous phrase) educational
system possible. It would also represent the very first time that
a language would be taught via television plus Tele-Lecture and
VERB.

Specifically, and building on the positive results of the
project just completed, we are prepared to recommend a new project,
which will involve the following:

1. A full-year course in Introductory Hebrew (3 hours a
week), will be taught by Dr. David Weinstein, from Chicago, via
television, Tele-Lecture and VERB.

2. Michigan State University has already offered its outlet
facilities for receiving this instruction and for full accredita-
tion for such a course.

3. In addition to the regular classes, adult will be enabled
to participate in the sessions via their own television sets.

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SUMMARY

This study dealt with the need to determine whether the use of the Tele-Lecture and Electrowriter in conjunction with a master teacher can be an effective means of teaching Hebrew simultaneously to groups in different cities. The null hypothesis that was established was that there would be no significant differences between the achievement of the groups in Grand Rapids and East Lansing, Michigan, and the achievement of the group in Chicago, where the instruction originated.

The implication of this study is that with an adult group of students who are at the same initial level of knowledge about the subject, the technique of Tele-Lecture and Telewriter in combination with a master teacher is an effective method of simultaneous instruction in different cities. When compared with the results of scores obtained by the group that heard and saw the instructor, no significant differences were observed.

Further implications include the desirability of using this method of instruction in geographically disadvantaged rural areas where the shortage of competent teachers is felt. From both an economic and practical point, it is advantageous to consider a method of instruction that would conserve on the time demands of an instructor and make instruction available to multiple groups simultaneously. Equipment rental is considerably less than the cost of transportational and instructional costs of a person. Such a system where both the instructor and student can communicate via Tele-Lecture adds an individualized dimension to the instruction and personalizes it as well.

REFERENCES

Anderson, John, "Teaching and Learning," Education for Later
        Maturity, Morrow, 1956.

Educating the Adult Educator, U. S. Office of Education, Adult
        Education Association, Federal Extension Service, and
        University of Wisconsin.

Gardner, John, Self Renewal The Individual and the Innovative
        Society (Harper and Row, 1964).

Houle, Cyril, "Methods and Objectives of Research in Adult
        Education," Adult Education, Summer, 1962.

Johnstone, John W. C., Volunteers for Learning: A Study of the
        Educational Pursuits of American Adults, Report 89,
        NORC, Chicago, 1966.

Kirchner, Corinne, "Motivation to Learn," An Overview of Adult
        Education Research, AEA of USA, 1959.

Lumsdaine, A. A., "Instruments and Media of Instruction,"
        Handbook of Research on Teaching (N. L. Gage, Editor),
        Rand McNally and Co., 1963.

Miller, Harry, Teaching and Learning in Adult Education,
        Macmillan, 1964.

Newberry, John, "Participants and Participation in Adult
        Education," An Overview of Adult Education Research, AEA
        of USA, 1959.

Pinnock, Theodore, A Comparison of the Effectiveness of Film
    and Bulletin in Transmitting Knowledge to Negro 4-H Club
    Local Leaders in Alabama and Caucasian 4-H Club Local
    Leaders in Wisconsin, Doctoral Dissertation, University
    of Wisconsin.

Solomon David, Bezdek, William F., Rosenberg, Larry, Teaching
    Styles and Learning, Center for the Study of Liberal
    Education for Adults, Chicago, 1963.

Teaching by Television, Ford Foundation, Office of Reports,
    New York, unpublished.

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APPENDIX A

Master Teacher

David Weinstein, President, Chicago College of Jewish
Studies; Ph.D. in Language Education, Harvard University, 1956;
former Associate in Education, Harvard University (1961-1964);
served as Consultant, Language Research Institute, Harvard
(1954-1964); Field Director for Harvard's Language Teaching
Program in Israel (1960-1964); Language Consultant, cities of
Quincy, Belmont and Waltham, Massachusetts, and Albany, New York;
co-author, First Steps in Reading Hebrew, Hebrew Through
Pictures, Teacher's Guide for Harvard Graded-Direct Method of
Instruction, Hebrew-English, English-Hebrew Pocket Dictionary,
Essential Hebrew by Examples, etc.; numerous articles in
professional journals on aspects of Hebrew vocabulary and the
teaching of Hebrew.

Evaluator

Kenneth R. Greenberg, Assistant Professor of Psychology,
University of Maryland; Ph.D in Psychology, Western Reserve
University; has served as psychologist in Board of Education,
Steubenville, Ohio, and in Department of Public Health,
publications in the field of counseling, guidance and mental
health.

APPENDIX B

Frequency Distributions of Criterion Scores
Classified by Subgroups and for Total Group

Midterm

Score	Subgroups* 1	2	3	Total
60	9	3	11	23
59	1	5	5	11
58	1	3	4	8
57	1	3	1	5
56	3		1	4
55	2	1	1	3
50		1		1
47			1	1
46			1	1
45			1	1
40	1		1	2
Total N	18	16	26	60

Final

Score	Subgroups* 1	2	3	Total
100	5	5	5	15
99	2	2	7	11
98	2	1	2	5
97	2	3	5	10
96	2	2	3	7
95	2		3	5
93	1			1
92		1		1
91		1	1	1
89			1	1
85	1			1
81	1	1		1
79			1	1
78			1	1
77			1	1
70				1
	18	16	29	63

Reading Errors

Score	Subgroups* 1	2	3	Total
0	5	4	6	15
1	1	1	5	7
2		2	3	5
3	3	2	4	9
4	1		2	3
5	2	1	2	5
6	1	1	2	4
7	1	3		4
8	1		1	2
9		1	1	2
12	1			1
17	1		1	2
21	1	1		1
42				1
	18	16	27	61

* 1 = Grand Rapids
  2 = East Lansing
  3 = Chicago

B-1

HEBREW VIA VERB

Student Registration

NAME_____ MALE_____ FEMALE_____

ADDRESS_____

CITY_____STATE_____

ZIP CODE_____PHONE NUMBER (Business)_____(Home)_____

AGE_____CURRENT OCCUPATION_____

HIGHEST GRADE ATTAINED IN SCHOOL_____

NUMBER OF YEARS DEVOTED TO STUDY OF LANGUAGE (S)_____

WAS LANGUAGE OTHER THAN ENGLISH SPOKEN "AT HOME"?___Yes ___No.

    If so, what language(s)?_____

    Please rate ability to:

	UNDERSTAND	READ	WRITE	SPEAK
Good	_____	____	____	____
Fair	_____	____	____	____
Poor	_____	____	____	____

EXPOSURE TO LANGUAGES OTHER THAN ENGLISH

LANGUAGE	NO. OF YEARS STUDIED	WHERE (ELEMENTARY SECONDARY, COLLEGE, OTHER)
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

HAVE YOU PREVIOUSLY ENGAGED IN ADULT EDUCATION CLASSES?___Yes___No

   If so, please give course title(s) and approximate year taken

   _____

   _____

HAVE YOU TRAVELED OUTSIDE THE CONTINENTAL UNITED STATES?___Yes___No.

   If so, please give countries and dates_____

   _____

   _____

IS THERE ANYONE IN YOUR HOME NOW STUDYING HEBREW? ___Yes ___No.

RELIGIOUS AFFILIATION_____

APPENDIX D

Summary of Relevant Variable Data—Midterm Scores
(Total Group)

Sex

	Male	Female
N	12	48
EX	663	2472
M	55.25	57.75
S.D.	5.99	4.01

Age

	Below 20	20-29	30-39	40-49	50-59	60↓
N	5	14	14	12	10	5
EX	288	829	826	662	571	257
M	57.60	59.21	59.00	55.17	57.1	51.4
S.D.	7.03	1.18	1.73	5.99	3.83	7.58

Educational Level

	High School	College	Graduate School
N	14	18	24
EX	783	1046	1397
M	55.93	58.11	58.21
S.D.	5.57	3.48	3.15

Other Languages At Home

	Yes	No.
N	18	42
EX	994	2385
M	55.22	56.79
S.D.	6.80	9.27

Matrix for Criterion Score X Years of Other Languages Studied

Score	Years of Study 0-2	3-5	6↓
60	7	9	7
58-59	8	6	5
56-57	2	4	3
55 and below	6	1	2

Matrix for Criterion Score by Number of Other Languages Studied

Score	Number of Languages 0	1	2	3↓
60	3	7	8	5
58-59	4	7	5	3
56-57	1	4	1	3
55 and below	2	4	1	2

Summary of Relevant Variable Data–Final Scores
(Total Group)

	Below 20	20-29	30-39	40-49	50-59	60+
N	5	14	14	13	11	6
EX	490	1369	1366	1216	1036	554
M	98.00	97.79	97.57	93.54	94.18	92.33
S.D.	1.79	2.34	2.45	8.53	7.59	8.40

Sex

	Male	Female
N	14	49
EX	1326	4705
M	94.71	96.02
S.D.	4.62	6.17

Educational Level

	High School	College	Graduate School
N	14	18	26
EX	1322	1749	2505
M	94.43	97.17	96.35
S.D.	7.16	3.08	6.71

Other Language At Home

	Yes	No
N	19	43
EX	1813	4133
M	95.42	96.12
S.D.	6.15	6.14

Matrix for Criterion Score by
Years of Other Languages Studied

Years of Study

Score	0-2	3-5	6+
100	5	4	6
99	4	3	4
98	1	3	1
97	5	2	3
96	4	2	2
95	2	2	1
97 & below	7	2	0

Matrix for Criterion Score by Number
of Other Languages Studied

Number of Languages

	0	1	2	3+
100	3	3	4	5
99	1	3	3	4
98	0	2	2	1
97	3	4	2	1
96	2	3	1	1
95	0	4	1	0
97 & below	2	5	2	1

Summary of Relevant Variable Data—Reading Errors (Total Group)

	Sex		Below 20	20-29	30-39	40-49	50-59	60↓
	Male	Female						
N̄	13	48	5	14	14	12	10	6
EX	125	143	42	30	36	49	92	27
M	9.62	2.98	8.40	2.14	2.57	4.08	9.20	4.50
S.D.	10.96	3.67	6.80	2.33	2.69	4.57	11.83	4.07

Educational Level

	High School	College	Graduate School
N	14	17	24
EX	97	56	78
M	6.93	3.29	3.25
S.D.	5.64	2.87	8.25

Other Languages At Home

	Yes	No
N	19	41
EX	77	187
M	4.05	5.56
S.D.	4.06	7.35

Matrix for Criterion Score by Years of Other Languages Studied

Score	Years of Study		
	0-2	3-5	6↑
C	5	4	6
1-3	5	8	8
4-6	7	4	1
7↑	8	3	3

Matrix for Criterion Score by Number of Other Languages Studied

Score	Number of Languages			
	0	2	2	3↑
C	1	5	4	5
1-3	4	5	5	7
4-6	3	4	4	1
7↑	3	7	2	2

Occupations of Subjects

	N
Teacher	11
Housewife	16
Secretary-clerical	11
Technical-clerical	1
Student	6
Engineer	2
Manager	2
Chemist	1
Medical Technologist	1
Factory Worker	1
Buyer	1
Maintenance Worker	1
Laboratory Technician	1
Hospital Employee	1
Tutor	1
Nurse	1
Boiler Control Operator	1
Self-Employed	1
Laboratory Assistant	1
Librarian	1
Omitted	1
Total	63

TRACK RECORD
FOR
B'Nai B'Rith Telelecture-Verb
Lecture Series

Location East Lansing   Date 2/15/67

Technician James Diehm

Time in Minutes	Audio	Visual
Initial Contact	Good contact Class began 8:30 pm EST	Good visual contact
1 - 15	Audio sounds fine. Infrequent feedback. Not distracting though.	8:50 - No visual contact with Chicago - Technicians are working on it presently. 8:55 - Visual working from Chicago -
16 - 30	Audio excellent. Everybody can hear fine.	Dr. Weinstein is using the electro-writer now. Very clear transmission
31 - 45	Audio very good. Absolutely no feed-back. Oops - there is a little feedback. Not disturbing though.	Student response to the electro-writer is a little hesitant - monitor asked three people before he got someone to write.
46 - 60	Audio fine - Excellent	Visual - at times Chicago doesn't transmit clearly. When he writes again, though, it comes out clearly.
61 - 75	Audio fine	Electro-writer skips from time to time Otherwise - very good.
76 - 90		

Please write additional comments on reverse side.

<u>V E R B Project Final Test</u>

Thursday, March 16, 1967

        Location _____

        Number _____

        Name _____

              (please print)

B'nai B'rith Commission on Adult Jewish Education
 1640 Rhode Island Ave., N. W.
 Washington, D. C. 20036

PART ONE

There are three sections to the first part. You will hear Dr. Weinstein
say a word, phrase or sentence. Please listen carefully to what he says
and circle the letter (a,b,c,d) that precedes the word, phrase or sentence
corresponding to what you hear. The word, phrase or sentence will be
said two times.

1.

a רִפְּבַת

b הָרַפְּבֶת

c בְּרָפְּבֶת

d זֹאת רָפְּבַת

2.

a יָד

b הָיָד

c בְּיָד

d הִיא יָד

3.

a הוּא

b הִיא

c הֵם

d הֵן

4.

a פֵּסָא

b הַפֵּסָא

c בְּפֵּסָא

d הוּא פֵּסָא

5.

a זֹאת

b זֶן

c זֹאת

d זֶ

6.

a מְפֻצָּעִים

b פּוֹצְעִים

c הַפּוֹצֵעַ

d הוּא פּוֹצֵעַ

7.

a אֲנָשִׁים

b הָאֲנָשִׁים

c אִישִׁים

d הָאִישִׁים

8.

a עֵז

b הָעֵז

c צֶעַז

d הִיא עֵז

9.

a אַף

b הָאַף

c הוּא אַף

d זֶה אַף

10.

a שְׁנַיִם

b הַשְּׁנַיִם

c הָעֵינַיִם

d הַזֵּבִים

Section Two

11.

a הַפֶּה שֶׁלוֹ

b הַפֶּה שֶׁלָה

c זֶה הַפֶּה

d הוּא הַפֶּה

12.

a אֵלֶה בַּפְּבוֹת

b הָרַפְּבוֹת הָאֵלֶה

c אֵלֶה הָרַפְּבוֹת

d הֵן בַּפָּבוֹת

13.

a הוּא אֵינֶנוּ

b הִיא אֵינֶנָה

c הָאִישׁ אֵינֶנוּ

d הָאִשָּׁה אֵינֶנָה

14.

a הַבֵּן שֶׁלוֹ

b זֶה בֵּן

c הוּא בֵּן

d הוּא הַבֵּן

15.

a הַחֶדֶר הַזֶה

b הַחֶדֶר הַהוּא

c זֶה הַחֶדֶר

d הוּא הַחֶדֶר

a זֹאת דֶּלֶת

b הַדֶּלֶת הַזֹּאת

c הַדֶּלֶת הַהִיא

d זֹאת הַדֶּלֶת

.17

a הַחַלּוֹן הַזֶּה

b זֶה הַחַלּוֹן

c הַחַלּוֹן הַהוּא

d זֶה חַלּוֹן

.18

a שְׁתֵּי נָשִׁים

b שְׁנֵי אֲנָשִׁים

c שָׁלֹשׁ נָשִׁים

d שְׁלֹשָׁה אֲנָשִׁים

.19

a רְחוֹב בָּעִיר

b זֶה רְחוֹב

c הוּא בָּעִיר

d זֹאת עִיר

.20

a זֶה הָעֵץ

b הוּא הָעֵץ

c הָעֵץ הַהוּא

d הָעֵץ הַזֶּה

Section Three

.21

a   הֵם בָּרְחוֹב

b   הֵן בָּרְחוֹב

c   הוּא בָּרְחוֹב

d   הִיא בָּרְחוֹב

.22

a   הֶחָנוּת בָּעִיר

b   הָרְחוֹב בָּעִיר

c   הֶחָנוּת בָּרְחוֹב

d   הָעֵצִים בָּרְחוֹב

.23

a   הַנַּעֲלַיִם בַּחַלּוֹן שֶׁל הֶחָנוּת

b   הָעֵצִים בָּרְחוֹב שֶׁל הָעִיר

c   הָאֲנָשִׁים בָּרְחוֹב שֶׁל הָעִיר

d   הַנָּשִׁים בָּרְחוֹב שֶׁל הָעִיר

.24

a   שְׁתֵּי נָשִׁים בַּחֶדֶר הַזֶּה

b   שְׁנֵי חַלּוֹנוֹת בַּחֶדֶר הַזֶּה

c   שְׁנֵי אֲנָשִׁים בַּחֶדֶר הַזֶּה

d   שְׁתֵּי נָשִׁים בָּרְחוֹב הַזֶּה

.25

a   אֵלֶּה שְׁנֵי חַלּוֹנוֹת

b   אֵלֶּה שְׁתֵּי דְּלָתוֹת

c   אֵלֶּה שְׁנֵי כִּסְאוֹת

d   אֵלֶּה שְׁתֵּי כַּפּוֹת

26.

a הַפָּסָאוֹת הָאֵלֶּה בַּתַּחֲנָה

b הָרַכָּבוֹת הָאֵלֶּה בַּתַּחֲנָה

c הַפָּסָאוֹת הָהֵם בַּתַּחֲנָה

d הָרַכָּבוֹת הָהֵן בַּתַּחֲנָה

27.

a הַכּוֹבַע אֵינֶנּוּ עַל הַכֵּסֵא הַזֶּה

b הַכּוֹבַע עַל הַכֵּסֵא הַזֶּה

c הַכּוֹבַע הַזֶּה עַל הַכֵּסֵא הַזֶּה

d הַכּוֹבַע הַזֶּה אֵינֶנּוּ עַל הַכֵּסֵא

28.

a זֹאת שֵׁן וְזֹאת עַיִן

b זֹאת עַיִן וְזֹאת שֵׁן

c זֹאת אֹזֶן וְזֹאת עַיִן

d זֹאת שֵׁן וְזֹאת אֹזֶן

29.

a זֶה הַפֶּה שֶׁל הָאִישׁ

b זֶה הָאַף שֶׁלִּי

c הַפֶּה הַזֶּה שֶׁלּוֹ

d הַפֶּה הַזֶּה שֶׁל הָאִישׁ

30.

a אֵלֶּה הָעֵינַיִם שֶׁלּוֹ

b אֵלֶּה הָעֵינַיִם שֶׁל הָאִישׁ

c אֵלֶּה הָעֵינַיִם שֶׁל הָאִישׁ הַזֶּה

d הָעֵינַיִם הָאֵלֶּה שֶׁל הָאִישׁ

PART TWO

Circle the letter (a,b,c,d) preceding the correct corresponding answer.

Circle the letter that makes the sound of B .31	Circle the letter that makes the sound of P .35
ב a	פ a
ם b	ח b
ו c	ב c
ם d	ם d
Circle the letter that makes the sound of CH .32	**Circle the letter that makes the sound of F .36**
ח a	ך a
ם b	ם b
ח c	ף c
ם d	ץ d
Circle the letter that makes the sound of S .33	**Circle the letter that makes the sound of TS .37**
ש a	ך a
ם b	ץ b
ם c	ך c
ב d	כ d
Circle the letter that makes the sound of M .34	**Circle the vowel that makes the sound of "a" (as in say)**
ך a	.38
ם b	˙˙ a
ם c	˙˙ b
ב d	˙ c
	˙˙ d

Circle the vowel that makes .39 **the sound of "o" (as in cord)**	**Circle the word that sounds** .45 **like "nasheem"**
a. ◌ַ	a. נָשִׁים
b. ◌ָ	b. אֲנָשִׁים
c. ◌ֶ	c. הַנָּשִׁים
d. ◌ֳ	d. הָאֲנָשִׁים
Circle the vowel that makes .40 **the sound of "oo"**	**Circle the word that sounds** .46 **like "rakevet"**
a. וֹ	a. בָּרַכֶּבֶת
b. וּ	b. הָרַכֶּבֶת
c. וֹי	c. לָרַכֶּבֶת
d. ◌ֹ	d. רַכֶּבֶת
Circle the word that sounds .41 **like "keesot"**	**Circle the word that sounds** .47 **like "tachanah"**
a. כָּסֵא	a. הַתַּחֲנָה
b. הַכְּסֵא	b. תַּחֲנָה
c. כִּסְאוֹת	c. בַּתַּחֲנָה
d. כָּסְאוֹת	d. לַתַּחֲנָה
Circle the word that sounds .42 **like "delet"**	**Circle the word that sounds** 48 **like "rechov"**
a. דֶּלֶת	a. רְחוֹב
b. הַדֶּלֶת	b. הָרְחוֹב
c. דְּלָתוֹת	c. בָּרְחוֹב
d. הַדְּלָתוֹת	d. בָּרֹאשׁ
Circle the word that sounds .43 **like "ben"**	**Circle the word that sounds** .49 **like "eer"**
a. הַבֵּן	a. פָּעִיר
b. בֵּן	b. הָעִיר
c. פֵּן	c. עִיר
d. שֵׁן	d. סִיר
Circle the word that sounds .44 **like "kovaeem"**	**Circle the word that sounds** .50 **like "chalom"**
a. הַכּוֹבַע	a. הַחַלּוֹן
b. הַכּוֹבָעִים	b. בַּחַלּוֹן
c. כּוֹבָעִים	c. חַלוֹן
d. הַכָּסָאוֹת	d. חֶדֶר

PART THREE

This is a true-false section. You will see Hebrew followed by
an English transliteration. Please circle the "T" if the
transliteration is correct; "F" if it is not.

	Hebrew			
51.	רַכֶּבֶת	rakavot	T	F
52.	הִיא	hee	T	F
53.	וְזֶאת	ve-zeh	T	F
54.	קֻפָּא	kuvah	T	F
55.	יָדַיִם	sheenayim	T	F
56.	הֵן	hen	T	F
57.	נְשָׁלִים	nasheem	T	F
58.	קְטַנּוֹת	ha-kootanot	T	F
59.	עֵינַיִם	anayeem	T	F
60.	שִׁנַיִם	ha-sheenayim	T	F
61.	פֵּיוֹת	peeyot	T	F
62.	אֵינֶנּוּ	enenoo	T	F
63.	חֶדֶר	chalon	T	F
64.	שְׁנֵי	shete	T	F
65.	דֶּלֶת	ha-delet	T	F
66.	חַלּוֹן	ha-chalon	T	F
67.	עֵיר	etz	T	F
68	רְחוֹב	rechov	T	F
69.	עַץ	eer	T	F
70.	חָנוּת	cheder	T	F

PART FOUR

In this part you are asked to write the transliteration in English
of the Hebrew word. Write the English transliteration next to the
Hebrew.

71 רְפֶבֶת _____

72 וַהָּיָא _____

73 בֶּפֶּסֶא _____

74 פָּקְנוֹת _____

75 אֲנָשִׁים _____

76 הָעֵינַיִם _____

77 הָאַף _____

78 הַשִּׁנַּיִם _____

79 תַּחֲנָה _____

80 חֶדֶר _____

81 הַדֶּלֶת _____

82 הַחַלּוֹן _____

83 שֶׁפִּי _____

84 אֶחָד _____

85 בְּעֵיר _____

PART FIVE

This is a matching section. Match the English transliteration from column B with the Hebrew counterpart in column A. Write the corresponding letter (a,b,c, etc.) from column B as your answer in the space provided next to the Hebrew.

A

86 ___ נַעַל

87 ___ חַלּוֹן

88 ___ חָנוּת

89 ___ עִיר

90 ___ רְחוֹב

91 ___ דֶּלֶת

92 ___ כִּסֵּא

93 ___ בֵּן

94 ___ תַּחֲנָה

95 ___ אֵינֶנּוּ

96 ___ פֶּה

97 ___ שְׁנַיִם

98 ___ אַף

99 ___ הֵם

100 ___ הוּא

B

a. hoo

b. eer

c. rechov

d. ben

e. keeseh

f. tachanah

g. peh

h. af

i. hem

j. chalom

k. shenayim

l. chanoot

m. hen

n. hee

o. delet

p. na'al

q. ha-keeseh

r. ha-delet

s. anenoo

t. cheder

V E R B Project Mid-Test

Thursday, February 16, 1967

      Location _____

      Number _____

     Name _____

        (Please print)

PART ONE

The first part consists of four sections. You will hear Dr. Weinstein
say a word, phrase or sentence. Please <u>listen carefully</u> to what he
says and circle the letter (a,b,c,d) that precedes the word, phrase
or sentence corresponding to what you hear. The word, phrase or
sentence will be said two times.

Section One

1.
a   אזן

b   האזן

c   האיש

d   האשה

2.
a   של

b   שלו

c   שלה

d   על

3.
a   איש

b   אשה

c   האשה

d   האיש

4.
a   זאת

b   זה

c   הזה

d   הזאת

5.
a   הזרוע

b   הכובע

c   כובע

d   זרוע

Section Two

6.
a   הכתנת הזאת
b   זאת הכתנת
c   הכתנת שלו
d   הכתנת שלה

7.
a   השער של האשה
b   השער של האיש
c   זאת השער
d   זאת השער שלו

8.
a   האיש הזה
b   האשה הזאת
c   זה האיש
d   הראש הזה

9.
a   הכובע על הראש
b   היד על הראש
c   הכובע של האיש
d   היד של האיש

10.
a   הזרוע שלו
b   הזרוע הזאת
c   זאת זרוע
d   זאת הזרוע

E-16

Section Three

11.
a   זֶה הָאִישׁ

b   זֶה אִישׁ

c   זֶה רֹאשׁ

d   זֶה הָרֹאשׁ

12.
a   זֶה הָרֹאשׁ שֶׁל הָאִשָּׁה

b   הָרֹאשׁ הַזֶּה שֶׁל הָאִישׁ

c   הראש הזה של האשה

d   זֶה הָרֹאשׁ שֶׁל הָאִישׁ

13.
a   הכובע הזה על הראש שלו

b   הכובע הזה על הראש

c   הכובע על הראש שלו

d   הכובע על הראש של האיש

14.
a   היד הזאת שלה

b   היד הזאת שלו

c   היד הזאת של האיש

d   היד הזאת של האיש הזה

15.
a   זאת האזן של האשה

b   האזן הזאת של האשה

c   האזן הזאת של האיש

d   זאת האזן של האיש

Section Four

16.

a האזן הזאת שלו

b האזן הזאת שלה

c זאת האזן שלה

d זאת האזן שלו

17.

a הראש

b האשה

c ראש

d אשה

18.

a הכובע על הראש

b הכובע הזה

c הכובע הזה שלו

d הכובע שלו

19.

a היד הזאת

b זאת היד

c היד שלו

d היד שלה

20.

a הכובע

b הכהנת

c הזרוע

d האזן

PART TWO

Circle the letter (a,b,c,d) preceding the correct corresponding answer.

Circle the letter that
makes the sound of K   .21

ל   a

שׁ   b

כ   c

ר   d

Circle the letter that
makes the sound of   Z   .22

א   a

ע   b

ב   .c

ז   d

Circle the letter that
makes the sound of   SH   .23

ה   a

שׁ   b

שׂ   c

ר   d

Circle the letter that
makes the sound of   L   .24

ח   a

ה   b

ל   c

ו   d

Circle the vowel that
makes the sound of   O.(as in cord)   .25

disregard the "X"

    אֱ a

    אֹ b

    אֳ c

    אֻ d

Circle the vowel that
makes the sound of   E (as in met)   .26.

disregard the "X"

    אֵ a

    אֶ b

    אָ c

    אֳ d

Circle the vowel that
makes the sound of   A (as in father)   .27.

disregard the "X"

    אַ a

    אֵ b

    אֱ c

    אֳ d

Circle the word that
sounds like   ha-zeh   .28

    הזאת a

    זאת b

    הזה c

    זה d

Circle the word that
sounds like   rosh

29.   a   הראש

    b   האשה

    c   ראש

    d   איש

Circle the word that
sounds like   kovah

30.   a   הכובע

    b   כובע

    c   הזרוע

    d   זרוע

8

PART THREE

This is a true-false section. You will see Hebrew followed an
English transliteration. Please circle the "T" if the transliteration
is correct; "F" if it is not.

31.	מִצְנֶפֶת	kovah	T	F
32.	זְרוֹעַ	zero'a	T	F
33.	אֹזֶן	rosh	T	F
34.	שֵׂעָר	se'ar	T	F
35.	יד	al	T	F
36.	אשה	eesh	T	F
37.	על	shel	T	F
38.	כובע	kootonet	T	F
39.	של	zeh	T	F
40.	ראש	ozen	T	F

PART FOUR

In this part you are asked to write the transliteration

in English of the Hebrew word. Write the English

transliteration next to the Hebrew.

41.   הַזֹּאת   _____

42.   הָרֹאשׁ   _____

43.   כּוֹבַע   _____

44.   אֹזֶן   _____

45.   זְרוֹעַ   _____

46.   הַיָד   _____

47.   כֻּתֹּנֶת   _____

48.   שֶׁלָה   _____

49.   הָאִישׁ   _____

50.   הָאִשָּׁה   _____

PART FIVE

This a matching section. Match the English transliteration
from column B with the Hebrew counterpart in column A. Write
the corresponding letter (a,b,c,etc.) from column B as your
answer in the space provided next to the Hebrew.

	A		B	
51.	_____	הַזֶּה	a	ha-rosh
52.	_____	הַכּוֹבַע	b	kootonet
53.	_____	שֶׁלוֹ	c	ha-ozen
54.	_____	הָראֹש	d	shelo
55.	_____	עַל	e	shelah
56.	_____	שֶׁלָה	f	ha-zot
57.	_____	הַיָּד	g	al
58.	_____	הָאֹזֶן	h	ha-yad
59.	_____	שֵׂעָר	i	eeshah
60.	_____	הַזְרוֹעַ	j	se'ar
			k	ha-kovah
			l	eesh
			m	ha-zeh
			n	ha-zero'a