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ABSTRACT
        A study investigated the relative effectiveness of
two new teaching technologies, television and computers, as compared
with traditional language laboratory instructional audiotapes in
introductory Spanish. The dependent variables examined included the
following: overall achievment level; reading, writing, and
grammatical skills; and improved speaking and listening skills, all
as measured by pure tests of reading, writing, listening, and
speaking. The subjects were 144 introductory Spanish students divided
into eight recitation groups. Half of these groups (control groups)
were assigned to 40 minutes a week of audiotape laboratory; two were
assigned to 40 minutes a week of tele-lessons, and two were assigned
to 40 minutes a week of computer drills. Other features of the course
were the same as the standard introductory curriculum. Results
indicate that the computer-assisted instruction method was clearly
the most successful of the three tested, but only in enhancing
writing skills and not, by extension, other language skills. Use of
the computer for a variety of skill development exercise, alone or in
combination with another instructional method, is recommended.
(MSE)

FINAL REPORT

INTERNATIONAL RESEARCH AND STUDIES PROGRAM

D. O. E.   GRANT #G008303642

EDUCATIONAL TECHNOLOGY AND LANGUAGE TRAINING

University of Colorado

Department of Spanish and Portuguese

1985

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INTERNATIONAL RESEARCH AND STUDIES PROGRAM

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EDUCATIONAL TECHNOLOGY & LANGUAGE TRAINING

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I. INTRODUCTION

1.1. Serious concerns about the nation's capacity in foreign language training have been expressed in policy circles, most notably by the President's Commission on Foreign Languages and International Studies* , which called for a concerted effort to assess our traditional methods and practices and to evaluate innovative approaches. As part of that effort, a series of foreign language conferences was held throughout the United States during the past several years, revealing widespread teacher interest in such approaches. Among the most promising of these are television and computers.

In the Spring and Fall of 1984 a research project was conducted at the University of Colorado designed to study systematically the value of these two emerging educational technologies as applied in the language laboratory. The aim of the study was to compare the instructional potential of these two methods with that of audio-tape labs and to implement, as part of the standard curriculum, those which promised to enhance learning.

*Strength Through Wisdom: A Critique of U.S. Capability, A Report to the President from the President's Commission on Foreign Language ad Internation Studies, November, 1979.

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1.2. At the outset of the project, the following eight questions were posed which were intended to serve as guidelines for the experiment:

a. Can any basic language skill be better taught with tele-lessons using native speakers to produce dialogues with natural speech patterns than with audio-tape labs?

b. Can any basic language skill be better taught by computer drill-and-practice methods than by tele-lessons or audio-tape labs?

c. What are the overall average levels of skill development produced by the three methods?

d. How well do instructors and students adapt to the new modes of instruction?

e. What attitudes do students develop regarding the new learning modes?

f. How is faculty-student interaction affected by the new modes?

g. Can student and/or faculty time be more effectively utilized through the use of the new modes?

h. What potential applications can be identified for the new modes of instruction? Other levels of Spanish instruction? Other languages?

1.3 These questions resulted in the following hypotheses which we proposed to test:

Main Hypothesis: The use of microcomputer-directed drills and of

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tele-lessons in teaching introductory Spanish will result in an increased level of achievement over audio lab method.

Sub-hypothesis 1: Microcomputer drills will improve reading, writing and grammatical skills to a greater extent than audio lab and tele-lesson drills.

Sub-hypothesis 2 : Improved grammatical skills of the computer group will free-up more time in recitation. This free time will be spent on conversational development, thus resulting in better speaking skills and listening skills for the computer group when compared with the audio-tape lab group.

Sub-hypothesis 3 : Tele-lessons will improve listening skills to a greater extent than audio-lab or computer drills.

Sub-hypothesis 4 : Use of computer lab and tele-lessons instead of audio-tape lab will not adversely affect student learning.

Measurement: Improved skills will be measured by pure tests of reading, writing, listening and speaking test scores.

II. REVIEW OF THE LITERATURE (For bibliography see Appendix A)

In 1963, Keating, studying audio-tape laboratories, assesssed the performance of students in language laboratcry-assisted and non-language laboratory classes. He measured three skills: reading comprehension, listening comprehension and speech production. This focus on language skills recognized the necessity of addressing specific types of performance as part of the research design. Keating studied 3,000 high school students of French in language-laboratory supplemented classes and compared them to 2,000 students in non-labortory classes. His most important finding was that the performance of the non-laboratory students was higher. Variables he considered included IQ scores, years of study of French, residence in France and the level of French (I,II,III,IV) achieved. It may be that the populations he compared were overly heterogeneous, but the negative result should not be ignored.

Rivers (1969:351) made certain serious criticisms of the Keating study. Although she acknowledged that Keating's study had aroused considerable interest, she pointed out that his study failed to: (1) specify the teachers' training in the use of the laboratory, (2) specify the methods used in the laboratory and (3) identify precisely the material. An additional shortcoming was the use of a reading comprehension test which had been constructed in 1940, before the advent of aural-oral methods. Rivers also criticized the use of testing instruments which favored the non-laboratory groups.

Rivers (1969) also evaluated the New York City Study, 1959-1963 and the second study of the New York City schools: "The Relative Effectiveness of Four Types of Language Laboratory Experience." She

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concluded that the two latter studies were more appropriate since (a) teachers were trained in the use of the language laboratory, (b) materials designed for the laboratory were used in teaching and (c) special tests devised to evaluate the listening and speaking skills were used.

Neither Rivers (1969) nor Allen and Valette (1972) mentions the use of CAI. Allen and Valette, however, mention other types of classroom technology.

In the mid-1970's an important concern was the high cost of Computer-Assisted-Instruction which at that time depended to a great extent on mainframe computers. The microcomputer was not yet easily available. Rockart and Morton (1975:75) claimed that "computers are going to become increasingly cost effective as a mechanism to assist the learning process." They also stated that the system in use at that time had a yearly rental cost of $250,000 to $1,000,000 while other costs could easily double this figure.

The cost of microcomputers is no longer an insurmountable problem because of their relatively lower cost as compared to mainframes. Olsen (1980:345) writes that "the advantages of the microcomputer are its flexibility, rapidly increasing sophistication and comparatively low cost. It is also independent of a time-sharing system."

Rockart and Morton (1975:87) describe the use of CAI in the Russian Language Program at Stanford University. In this audio-visual Russian course, CAI students performed significantly better than the control students on final examinations. Nevertheless, Rockart and Morton mentioned that a defect in this study was that different examinations were used on some occasions. They lament that the Stanford group published very little after the 1969 report.

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In the same critique, Rockart and Morton (1975:95) called for individuals and programs to tackle the necessity to use technology effectively. They mentioned (95) that, "Apart from the University of Illinois and the TICCIT project, there seems to be less than the necessary amount of active experimentation underway at this point." They further state that:

> In many of the massive projects considerable attention was paid to hardware, and little or none was paid to imaginative courseware of such systems. Careful unbiased assessment of the reason for success...or failure... has not been the hallmark of CAI projects to date.

Olsen (1980:343) mentions the slow expansion of CAI in foreign language studies. This was evident in The Computer and Education, a compilation of articles (1973) which provides general information about computers and education, but does not describe in a separate article the use of CAI in language instruction.

In a volume compiled by Kepner (1982) on computers in the classroom, the articles focus on school but not college students. Kepner's compilation is primarily oriented to CAI in mathematics, science and business instruction, but not in English or other language instruction.

Ahl (1982) extolled the use of computer games for teaching aspects of English and other languages to school children. He described the success of using games such as "Hangman" and "Don't Fall" which he said were "fascinating" and "addictive." Underwood argues that such "rewards" are simply nonsense (1984:52):

> Communicative CALL [Computer assisted language learning] will not try to "reward" students with congratulatory messages, lights, bells, whistles, or other such nonsense. When the student is using language to try to solve a problem or achieve some goal, success will be sufficient reward in itself.

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Alderman and Apple (1978;40) evaluated the results of two major demonstrations, TICCIT (Time-Shared, Interactive, Computer-Controlled Television) and PLATO (Programmed Logic for Automatic Teaching Operations) which contributed to the field of CAI by making available sophisticated instructional systems able to serve more than a hundred students at a given time. In the Plato study, from 1 to 20 hours per semester (less than 33.3% of the course) were designated for use on the computer. In the TICCIT study, up to 100% of the course was designated for use on the computer. Yet in neither study were there achieved gains in student performance. Referring to this, Alderman and Apple (1978:44) wrote:

> Evaluation of the educational impact of each project revealed
> that neither CAI system had reached the potential so long
> claimed for this form of instructional technology. The PLATO
> system met with favorable reactions from teachers and students,
> but it had no significant impact on student achievement. The
> TICCIT program did result in improved student achivement.
> However, the completion rate for courses under the TICCIT
> program [an individualized one] was lower than the completion
> rate for the same courses under a lecture-discussion format.

Global types of measurements which attempt to evaluate the total performance of an individual in a language class may provide less precise and revealing information than specific instruments intended to measure specific areas of performance such as reading, writing, speaking, listening comprehension and degree of command of grammatical forms. Common sense would indicate that if a specific language skill is emphasized by the teacher, results in a skill-specific test will show improvement in that skill. In the absence of a skill-specific test, such an improvement would be hidden within a general all-skills test and its results.

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It appears that both the PLATO and TICCIT evaluations done by ETS were too large (TICCIT with 5,000 students in 200 sections and PLATO with 4,000 per semester) and too broad in scope, including various subjects areas such as English composition, algebra, biology and chemistry. Given the large number of students, and the manner in which the experiment was conducted, it would seem difficult to control for extraneous variables.

In another study undertaken by Educational Testing Service (Swinton, Amarel and Morgan 1978), an evaluation accompanied the PLATO demonstration of the teaching of reading and mathematics in elementary schools. About 100 technically sophisticated interactive terminals in more than 40 classrooms served over 1,000 students. According to Amarel (1983:21):

> By far the most significant finding of the elaborate
> evaluation that accompanied the demonstration...was the
> powerful effect the teachers had on both the course and
> the outcome of the implementation. The contributions of
> the computerized curricula to student achievement were
> masked by the teacher effects....The impact of the
> courseware was moderated ...by the teachers' decisions
> about such commonplace problems as the schedules that
> controlled access to the terminals, the integration of the
> computerized lesson with ongoing instruction, and the
> allocation of their own time to various classroom
> activities.

The above led Amarel to conclude that the real effect of the computer is due to the method used and the functions assigned to this machine by the teacher within the social environment of the classroom. Thus, the social context as it interacts with methods, and not the computer itself, produced an effect on instruction. It appears that the Swinton et. al. (1978) study mentioned above involved fewer students than the TICCIT and PLATO studies and that the subject areas considered were fewer and more manageable.

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Certain studies (see Alderman et. al. 1978 and Bunderson 1978) report that students using CAI in the completely individualized mode tended to have lower rates of course completion.

There are certain institutional constraints which exist and affect the use of CAI. A foreign language program with its own internal structure and class scheduling normally already exists in most educational institutions. Textbooks and audio-tapes with their individual orientation normally are part of such a course, and the sudden introduction of a CAI component can lead to either (1) the discontinuance of the existing courseware in favor of a completely new method or (2) the adaptation of the new CAI to the existing courseware.

Kearsley et. al. (1983b:92) have recognized that certain constraints exist in computer-aided instruction (CAI):

> It is clear that in attempts to introduce [CAI] into
> institutional settings with strong traditions, the
> potential value of [CAI] is often never properly realized....
> To the circumvent this problem, there have been many
> attempts to create new settings where old traditions
> wouldn't apply.

Prevailing attitudes concerning CAI in foreign language departments were surveyed by Olsen (1980). Of the 1,810 foreign language departments which received questionnaires, 602 responded. Of these 62 (10%) reported active use of CAI and an additional 14 stated an intent to use CAI within the next few years while 527 indicated that CAI was not in use and . uld not be considered in the near future. Olsen describes at length the resistance to the use of CAI by foreign language departments. The negative attitudes leading to this resistance were based on misinformation, a lack of knowledge of the data available on the use of CAI, a claim that CAI was dehumanizing,

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the presumed lack of cost-effectiveness of CAI, suspicions of
computers and modern technology in general and the very low-priority
given to CAI by senior faculty within traditional language
departments. While recognizing that such resistance exists, a modest
adjunct CAI program which is successful and viewed favorably within
the institutional setting may be the first successful step leading to
more widespread and innovative usage of CAI.

In their review of computer based instruction projects over the
last two decades, Kearsley, Hunter and Seidel (1983a:90) enumerated
the following nine major outcomes:

1. There is ample evidence that computers can make instruction more
   efficient or effective.

2. We know relatively little about how to individualize instruction.

3. We do not have a good understanding of the effects of
   instructional variables such as graphics, speech, motion or humor.

4. A great deal has been learned about overcoming institutional and
   organizational inertia and resistance to change in the context of
   implementing CAI.

5. Significant progress has been made on the development of authoring
   tools and techniques for CAI.

6. Good mechanisms have been developed for the dissemination of CAI
   ideas and courseware.

7. CAI has spurred research throughout the entire field of
   instruction.

8. Federal funding has played a pivotal role in advancing CAI.

9. We have just scratched the surface of what can be accomplished
   with computers in education.

According to Underwood (1984:19), the grammar translation method,
the audiolingual method, and the cognitive-code method with their
emphasis on getting the form right, are examples of placing syntactic
accuracy before fluency in communication, while communicative language

learning methods emphasize fluency over accuracy. As language

teaching becomes language learning with an increased emphasis on

communication over accuracy, intermediate steps will be necessary in

certain institutions.

Although Underwood feels (1984:28) that this modification in the

colleges is unorganized and lacking in guidance, the "modified

audiolingual approach" is beginning to include increasing amounts of

meaningful practice.

Underwood describes various current methods which are intended

to develop communicative competence (19-29) and lists certain features

held in common among these methods, including:

1. meaningful rather than mechanical practice

2. priority of listening over speaking

3. exclusive use of the target language (except ... in Community
   Language Learning and the first part of a Suggestopedic lesson)

4. implicit rather than explicit grammar

5. modeling instead of correction and

6. special efforts to create a low-anxiety atmosphere in the
   classroom.

Underwood is not satisfied with the drill-and-practice mode used

in CAI instruction and calls for increased use of dialog-simulation

and other meaningful interactive exercises between the computer and

the student. He correctly argues that the potential of the computer

has not been realized and that the types of drills used tend to be

unimaginative. As the profession moves to improve and produce more

Spanish and other language software, it is likely that

drill-and-practice drills will be augmented or replaced by more

meaningful CAI exercises. It is expected that drill and practice of

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grammatical forms will be augmented by simulated dialogs and other
simulations which will accept.student responses intended to develop
fluency and communicative competence rather than syntactic accuracy.
Underwood recognizes (1984:38-39) that the newness of CAI, the
labor-intensive nature of creating software, the scarcity of language
teachers who know programming, the lack of expert computer programmers
versed in language .eaching and the not yet commercially viable
software are the reason behind the "prosaic" drills which are
currently in use.

Olsen (1980:343) reports that some foreign language departments
are postponing the introduction of CAI until the flaws in accessible
programs or hardware are overcome. Such departments point out the
lack of ready-made programs suited to specific needs as a reason for
postponing their use of CAI. A thread which runs through previous
research (Underwood 1984:39) recognizes that the computer is merely a
tool and that of paramount importance is the method employed in the
use of this machine rather than the machine itself.

Regarding previous studies which address the impact of CAI on
student achievement, Underwood (94) writes that there is still very
little experimental evidence which supports or denies increased
proficiency in a second language. Reporting information from the 62
departments using CAI, Olsen (344) writes, "The variety of courses
with computer assistance indicates much experimentation with promising
possibilities, but the only areas with documented success and
widespread use of CAI remain vocabulary and grammar exercises for
elementary and intermediate courses."

It is the intent of the Colorado study to provide experimental
evidence with recommendations for future study and implementation.

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III. PILOT EXPERIMENT BEGINS

3.10 ADVANCE PREPARATION

Although a great deal of time and thought was dedicated to the design of the research project during the Spring and Fall of 1983, the bulk of the preliminary work was accomplished in October, 1983 through January 31, 1984. This preliminary work conisted of:

a. A literature search to see what had already been done in the field of foreign language teaching using the two new technologies: computers and television.

b. A search for and review of software available for Spanish CAI.

c. A search for and review of existing national exams that could be used as pre-test and mastery tests.

d. Development of an entrance questionnaire that could be used to establish the presence or absence of specific elements which might influence language learning. It was felt that factors such as grade point average, previous Knowledge of Spanish, geographic location, and travel in a Spanish-speaking country should be included in such a questionnaire.

e. Development of an exit questionnaire that could be used to glean information about student attitudes towards the course in general and towards each of its components: lecture, recitation sections, text and audio, computer and tele-lesson labs, for example.

In addition, the project staff met on a regular basis to clarify the goals of the project and to review experimental design considerations. As each phase of the materials was completed the research group met to review and evaluate it.

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Early in November, after having completed the software search, it was determined that although there are over 100 programs available for teaching Spanish, very few of these are of very high quality or usefulness given what we were attempting to test. It was decided, moreover, that even these two programs that were judged to be of sufficient quality were of limited usefulness since the material being practiced did not coincide with the textual material being studied. It was therefore decided that we would develop our own software. This task was acomplished by one of the members of the research team, Dr. Ralph Kite, at his own cost. Dr. Kite was also the lecturer for the Spanish 101 course in the Pilot Study and is the author of the text used in the course.

3.20 The first half of the research project was conducted as a pilot experiment with the goal of validating and testing the measuring instruments, tele-lessons, computers, software and the soundness of the research design.

Prior to the beginning of classes in Spring, the researchers met with the TAs who had been selected to teach the recitation sections to explain the goals and objectives of the research. Along with a copy of the class syllabus each TA was given an information sheet explaining the grading system as well as other administrative details and procedures.

3.30 PILOT PROJECT DESIGN AND EXECUTION.

3.31 Sample

The specific target of the research was the Spanish 101 course. The study population, consisting of 144 students, was divided into two large lecture groups of 72 students each, and each lecture group was

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further divided into 4 recitation groups of approximately 18 students each. Of the 8 groups, 4 were designated control groups, while the remaining four were assigned to experimental groups; two to the T.V. portion of the research and two to CAI. The experimental groups were assigned to 40 min/wk of tele-lessons or computer drills, while the control groups were assigned to 40 min/wk of audio-tape labs. Attendance at labs was required and was indirectly monitored.

3.32 Treatment of the sample

The experiment was carried out as a modification of the standard introductory level Spanish curriculum (SPAN 101, 102) at the University of Colorado.

Typically the course includes two to four (depending on enrollment) large lecture sections of approximately 100 students each, which meet for two hours weekly. The course also includes recitation sections in which students receive three hours per week of individualized instruction by teaching assistants (TAs), in groups of approximately 20 students per recitation section. The students are assigned to recitation and lecture sections by computer. At no time does the Spanish Department have any input into which student is placed in which section. Thus, for the purposes of research, there is no way to match the control and experimental sections based on ability levels, linguistic background, age, grade level, or GPA.

Large lectures provide extensive grammatical explanations and presentations on culture. In the recitation sections the students are drilled in the specific elements of grammar that are being taught in the larger lecture sections. In addition, the culture presentations from the lecture sessions provide themes for meaningful conversation by the student under the tutelage of the TA. As part of the

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traditional course structure, the student also attends an audiotape lab where he or she is able to listen to a correct speech model and to record and compare his own iterative attempts for comparison with the model.

One frequent criticism of this standard approach to language teaching is that too little time is available for developing conversational skills, since classroom time must also cover listening comprehension, reading, writing, and grammatical explanations. Accordingly, one specific goal of the project was to determine if the new technologies could free-up class time for conversational practice.

On the first day of classes (in the Spring semester which was to serve as a pilot experiment to test the validity of the measuring instruments and the research design) the control groups were instructed in the use of the audio labs. Since the first week of classes is given over to pronunciation drills and neither the computer (as it was used in this study) nor the tele-lessons are suitable listening partners, instructions in the use of these two teaching aids were not given until the second week of classes when the students began attending those labs. The goals and objectives of the research were also explained to the students at the beginning of the semester; all students were asked to fill out the Entrance questionnaire (appendix B) at that time.

Each student participated in bi-weekly lectures where grammatical and cultural information was presented. Three times per week students also attended recitation sessions where the TAs drilled them in the grammatical elements that had been taught in lecture and led them through some directed conversation. Attendance at recitation was required and was monitored.

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In order to control a number of potentially invalidating variables, the following adjustments were made to the model used at C.U. for the past 10 years: The TAs selected to teach the recitation sections for the project were about the same level of teaching ability and experience and all were non-native speakers. All were Master's students. However, two were just finishing the Master's degree, and two were just beginning. Each TA was assigned one research and one control group. All sections, control and research, used the same general instructional materials. These consisted of the text, <u>Puertas a la lengua española,</u> its accompanying <u>Manual de laboratorio</u> , <u>Cuaderno de ejercicios escritos</u> and <u>Puertas al mundo hispánico</u> .

The class schedule and the skills emphasized in the traditional (control) and experimental curricula are outlined on the following page.

TRADITIONAL CURRICULUM

Five Hours of Class Per Week

	Mon. Recitation	Tue. Lecture	Wed. Recitation	Thur. Lecture	Fri. Recitation
Class Size	18 (x4)	72	18 (x4)	72	18 (x4)
Content	Skills *L,S,R,W	Grammar Culture	Skills *L,S,R,W	Grammar culture	Skills *L,S,R,W

*Listening, Speaking, Reading, Writing.

Language Lab: 40 min./week: Listening, Comprehension and speaking skills. No monitoring by instructor in the lab.

Workbook: Weekly exercises with immediate feedback (answers in back of book).

EXPERIMENTAL CURRICULUM

Five Hours of Class Per Week

	Mon. Recitation	Tue. Lecture	Wed. Recitation	Thur. Lecture	Fri. Recitation
Class Size	18 (x4)	72	18 (x4)	72	18 (x4)
Content	Emphasis Speaking	Grammar Culture	Emphasis Speaking	Grammar Culture	Emphasis Speaking

Computer Lab: Emphasis on writing. 40 min./week
or
Tele-lessons: Emphasis on listening comprehension. 40 min./week. Monitored weekly.

It should be emphasized that in the pilot study speaking skills were not directly covered by laboratory instruction using the two experimental technologies. Rather, conversation was to have been practiced extensively in the classroom, since more time should be available for that purpose. The relatively routine tasks of providing drills and exercises were to have been taken over by the new

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technologies, thus allowing the recitation sections to be focused primarily on conversation, with the human teacher serving the student as a Spanish-speaking conversational partner.

3.40   TEACHING METHODOLOGIES

The basic instructional materials and equipment used to carry out this project consisted of the text, Puertas a la lengua española, its accompanying Manual de laboratorio, Cuaderno de ejercicios escritos and Puertas al mundo hispánico , 2 IBM PC computers, 40 audio-tape stations, and 4 VCR stations which could accommodate up to 6 students each.

The text served as the core of the project since it contained all the material to be presented. The basic format of the text is 1) dialog or cultural readings which recombine the vocabulary into a new context, 2) textual questions over the dialog or cultural reading followed by personal questions for further practice, 3) drills which provide a gradual, planned progress toward the mastery of the patterns of the Spanish language, 4) review questions which provide additional reinforcement of the basic vocabulary and structures. The reader, Puertas al mundo hispánico, provided thematic material for conversation in class.

3.41   CAI

The CAI component of the research project was to provide a drill-and-practice adjunct to classroom instruction as well as a certain amount of instruction. Our original proposal was to purchase existing software for use with either Apple IIe or IBM PC computers. A thorough search for software, however, indicated that most existing software is unsuitable for a college level first semester Spanish

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course. In addition, none of the few existing software products aimed at an appropriate educational level was designed to correspond with any available text nor did any aim at instruction, but only drill and practice. These defects were judged a serious barrier to the use of such course material for several reasons.

In a beginning language course, the material (vocabulary, syntactic structures, verb forms, etc.) is very carefully controlled by the text. Textbook authors go to great lengths to avoid exercise material containing unfamiliar words or structures and to enter and re-enter material in a careful progression. Computer software which is not related to a specific text cannot maintain this same care.

Although one can make some general assumptions about the order of structures (e.g. the easiest ones will generally be first), for the most part vocabulary is introduced in relation to topical or cultural themes and may appear in any order. Available vocabulary drill programs based on frequency lists do not parallel any text in print. Having the student practice random vocabulary lists 'ɔ not a promising pedagogical approach to language learning since many words will never be reinforced in the classroom, and much of the effort put into the drill exercises will have no immediate pay-off in increased understanding of classroom or text content. Such programs may prove useful in more advanced classes or for individuals who are trying to learn a language without benefit of a formal course, but are generally unsuitable for a first-semester class.

For these reasons the decision was made to produce our own software, using drill material that would correspond in both vocabulary and syntax with what was being taught in the classroom. Because there was considerable time pressure, it was decided to

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concentrate the drill material on verbs. The Spanish verb system is the most difficult aspect of the language and one of the easier aspects to adapt to computer-assisted instruction. In addition, by limiting the material to one specific kind of drill, students had to become familiar with only one basic set of instructions which minimized the problems of those unfamiliar with computer operation.

The programs were produced by Professor Ralph Kite who is the author of the text, was the lecturer for both lecture sections and who has, in addition, considerable experience with programming. Some features of the software are as follows:

1. The computer addresses the student by name. In order to know the student's sex (since gender agreement is necessary in Spanish), a file was created at the beginning of the semester and was transferred to each program disk. The student is asked for a number and the program searches the file for the name and sex and uses the name frequently to individualize the program, making it more personal. For example:

> HOLA, ¿CÓMO ESTÁS, ANITA? (Hello, how are you, Anita?)
> VAMOS A PRACTICAR LOS VERBOS. (Let's practice the verbs)
> ¿ESTÁS LISTA, ANITA? (Are you ready, Anita?)

2. Each program begins with a brief review of the point to be practiced. For example:

IN THIS LESSON THERE ARE EIGHT STEM-CHANGING -IR VERBS TO LEARN.
THEY ARE REGULAR -IR VERBS WITH THREE POSSIBLE CHANGES:

AN "E" MAY CHANGE TO "IE"	AN "O" MAY CHANGE TO "UE"
PREFERIR-TO PREFER	MORIR-TO DIE
SENTIR-TO REGRET	DORMIR-TO SLEEP
MENTIR-TO LIE	
AN "E" MAY CHANGE TO "I"	

PEDIR-TO ASK FOR

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```
               SERVIR-TO SERVE
               REPETIR-TO REPEAT

           PRESS ANY KEY TO CONTINUE
```

This review takes advantage of the computer's display capabilities (blinking characters, highlighting, etc.). The drills are meant to be used after the material has been studied and are not designed for self-instructional use.

3. Graphics bells and whistles have been used only minimally. A number of students in our research project complained when they were used because they "resented wasting their time on that stuff." This corresponds to our findings in the literature review. It may be that college students are too sophisticated for motivational tricks that may be more appropriate for children of "Sesame Street" age. For this as well as other reasons, programs such as the SPANISH HANGMAN were not selected for purchase for this project.

4. The program analyzes the student's answers in various ways depending on the grammatical point being practiced and reports not only that the answer is wrong but also why it is wrong. For example:

```
          HERE ARE YOUR RESULTS, ANITA:
          YOU TRIED 4 ITEMS AND GOT 0 CORRECT)
          YOU MISSED 2 ENDING (S) AND 1 STEM (S).
          IN 1 CASE (S) YOU GOT BOTH WRONG.

               PRESS ANY KEY TO CONTINUE
```

Running scores are kept in these sub-categories allowing an assessment by the student of what aspects need additional practice.

5. The program keeps track of the items missed and, after a pre-set

number of errors, repeats those items. This insures that no word

is left with only an incorrect response.

6. When the student misses a pre-set number of any of the

sub-categories, the computer requires a review of that aspect of

grammar before continuing to drill, since repeated errors are not

conducive to learning. For example:

YOUR FINAL SCORE IS 55%.
IT IS OBVIOUS TO ME YOU NEED MORE ON THIS MATERIAL, ANITA.
DON'T YOU AGREE? STUDY PAGES 112-116 IN THE TEXT AND TRY AGAIN.

                    PRESS ANY KEY TO CONTINUE

This is a type of individualization that the computer can perform

better than the instructor because of the unlimited opportunity

for drill and practice that it provides with greater flexibility.

7. Errors are reported and the correct form is shown immediately for

comparison. For example:

¿No_____vosotros esquiar en el invierno? [preferir]
STUDENT: VERB? [+ENTER] preferís
COMPARE THEM: preferís

    COMPUTER: NO, ANITA. YOU AREN'T EVEN CLOSE
    BOTH THE STEM AND THE ENDING ARE WRONG.
    THE CORRECT FORM FOR "vosotros" IS: preferís

    PRESS "ESC" TO STOP ANY OTHER KEY TO CONTINUE

The software author felt that this kind of immediate reinforcement

is superior to the "Wrong--Try again," type of response.

8. In the later lessons, as the number of irregular verbs warrants,

help screens are available when the student has no idea of the

answer.

9. In the early lessons, the reward cycle ended with 50 correct

responses but students complained that that was not sufficient.

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Later drills continue to 300 correct responses. For the Fall

semester, all the CAI drills were extended to 300 correct

responses. Each drill contains from 60 to 100 different items.

10. Most points are drilled on three levels: a multiple choice type

exercise, a fill-in verb drill with the Spanish infinitive shown,

and a fill-in drill with the verb given only in English.

11. New vocabulary items are drilled on a random basis to create some

variety.

12. Since the IBM PC is capable of generating the accent marks and the

ñ, a subroutine allows these to be generated by the student's

input of a capital letter.

13. The drills are not timed because it was realized early that a

number of the students had little or no typing skills. Since the

answers are usually just one word, students who cannot type can

manage without difficulty.

14. The students control not only the pace at which they will work,

but also the level of difficulty (easy,difficult) and at times the

topic (adjectives, ser and estar).

In addition to the custom-designed software, a number of

commercial programs were purchased in order to allow students to use

the computers for extra study. This commercial software was available

two hours daily but, in fact, was never used by any of the students.

Students preferred drilling material that was being reinforced in the

classroom and which would be tested on examinations and quizzes.

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3.42 TELE-LESSONS

The tele-lesson component of beginning Spanish was intended to improve listening comprehension and to introduce the college-level student of elementary Spanish to Hispanic language and culture. It focused on improving general listening comprehension with the reinforcement of a visual image. Since an objective of the project was to develop the tele-lesson component into an integral part of the curriculum, videotapes were selected over the standard television broadcast because they offered greater flexibility. Students viewed tele-lessons 40 minutes per week, the content corresponding to the lecture and text material for that week. It was predicted that use of tele-lessons should improve general listening comprehension without any overt effort to develop or correct specific details of grammar or vocabulary which is common in other teaching methods.

A search was done for commercial material to be used with existing video cassette recorders. Some good programs were found but were not purchased for two reasons: 1) the same logic that prevented our purchase of CAI software, i.e., the importance of coordinating lab and lecture; and 2) cost. Therefore, fourteen existing experimental tele-lessons, produced by the Media Center at the University of Colorado over a two-year period, were utilized. Each consisted of the following features:

1. Dialogues, monologues or skits dealing with the chapter material performed by native speakers of some dialect of Spanish. (For enhancing listening skills.)

2. Reading selections correlating pictures with the material being read aloud on the videotape. This gave the student a visual orientation to the content of the reading selection and an

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opportunity to hear the pronunciation of the words before working with the material in the recitation section. (For enhancing listening and speaking skills.)

3. Printed material, usually a dialogue, displayed on the video. screen was read aloud by native speakers. (For enhancing reading and listening skills.)

4. A grammar lesson produced on the screen and generally given in English. The student at times saw the instructor, at times the grammar lesson on the screen. Also shown on the screen were a number of examples to illustrate the point.

5. The video programs could be viewed by 6-8 students at one time and at their convenience.

6. Each lesson of the basic text began with either a dialog or a cultural reading which presented the basic structures and vocabulary of the unit. The primary role of these lessons was to present the dialogs and cultural information to the student in as natural a setting as possible.

Although the tele-lessons were not designed for developing the students' speaking skills directly, it was projected that developing listening and reading skills would enhance speaking skills as well. Despite the fact that the TAs in the project were not native speakers, the students in the tele-lesson sections had ample exposure to a variety of native voices from the tele-lessons.

3.43 AUDIOTAPES.

In the traditional mode, the basic instuctional materials used were the same as those used by the two research modes. In addition, the audiotape lab provided commercially prepared audiotapes and laboratory manuals coordinated with the text, as in the standard course. The

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audiotapes were intended to aid in developing listening and speaking control of Spanish. The tapes include the standard drills and listening sections which comprise typical language laboratory listening tapes. An advantage of this method is that it allows the student to hear native speakers and provides him with an opportunity for evaluating his own efforts using the model as the norm. A number of disadvantages are also apparent. For example, the student must correct himself even though, in a beginning Spanish class, few students are capable of hearing their mistakes when compared to the model. Additionally, the audiotape does not communicate with the student since it is incapable of feedback nor is it flexible in that it cannot adjust its speed to the ability of the student. The tape programs are in no way personalized. The student merely repeats an exercise without ever knowing whether he has done it correctly or not.

3.50 MEASURING INSTRUMENTS.

The primary measure of Spanish mastery was a four-part test used as pretest and posttest. During the first two-and-a-half weeks of the semester, all students took the mastery test as a pretest and also completed a questionnaire which we call the "Entrance Questionnaire" (see appendix B). The posttest was the same mastery test administered again at the end of the semester. Two of the four control groups were exempted from the pretest in order to control for possible effects on posttest scores of having taken the pretest. In addition to the instruments already mentioned, a speaking test, three dictation quizzes and an "Exit Questionnaire" were administered to all students at various points in the semester as part of the total battery of tests.

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3.51 Mastery Test

A number of standarized tests exists for determining mastery of the Spanish language. The Department of Spanish and Portuguese uses such a standardized placement test for placing students in the proper level Spanish class. Although that test is in large measure successful, it provides no differential diagnosis of the strengths and weaknesses of individual students since only the overall raw score is used for placement. In addition, since the test is meant to test mastery up to third or fourth semester level, students finishing a first semester class would tend to score quite low in the differential tests making the results difficult to analyze. In addition these standardized tests do not specifically test material being taught in the lectures and drilled in the 101 course. For these reasons the project staff decided to develop an exam designed to test the information being taught in the course and capable of differenciating among the four basic Spanish language skills: listening, reading, writing and speaking.

3.52 Entrance Questionnaire.

The entrance questionnaire was used to establish the presence or absence of specific elements which might influence the degree and rate of language learning and thus invalidate certain results. Therefore, it addressed information related to the linguistic, academic, social, economic and cultural background of the student.

Each year, hundreds of students with a wide variety of backgrounds enroll in elementary Spanish classes. A growing number of these students have already completed one or more years of a language at the midddle and/or secondary school level; for many of them that language is Spanish. Such students often tend to do better in a first

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year first semester Spanish class than students with no prior

exposure. Other elements which tend to influence course performance

in this same manner are: travel in a Spanish-speaking country;

exposure to Spanish spoken in the home; long-term residence in .

geographic areas such as Texas, Florida, New Mexico, California and

Colorado where large percentages of the population speak Spanish;

repetition, for whatever reason, of the first year Spanish course;

high grade point averages; and student's maturity (age was used as the

criterion). The entrance questionnaire was designed to determine each

student's status in each of these respects.

3.53 Participant Observation.

The purpose of this aspect of the research project was to add

another dimension to the study of educational technology and language

training. Educators have recently recognized the value of using

anthropological field methods, specifically participant observation,

in the attempt to improve the educational process.

Participant observation is the most important method used by

anthropologists to gather ethnographic data. This data is commonly a

source of hypotheses about cultures because it reveals patterns of

behavior independently of any theoretical preconceptions.

In this research project, participant observation supplemented

the statistical data. Although quantitative data yields important

information, it neglects many phenomena that can best be gleaned from

firsthand involvement in the educational process. Factors such as

student attitudes, motivational levels and differences in instructors'

personalities and teaching practices can have effects that may escape

detection by even the most sophisticated educational or psychological

tests. For these reasons, participant observation was included as a

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major component of the evaluational methodology.

Several sources of information were available to the ethnographer. The lecture and recitation sections were observed, the three laboratory settings were reviewed, and the students and TAs were informally interviewed. Exit questionnaires and TAs' journals provided supplementary information. By far the most important of these sources was the classroom observation, which overlapped considerably with informal interviews.

The ethnographer attended approximately four recitation sections per week, attempting to divide her time among the three laboratory methodologies. Her own status as a student proved a minor liability in that her own class schedule prevented her from attending all of the recitation sections. She was able, however, to attend on a regular basis at least one section taught by each instructor, and in one case, both sections of one instructor. At least one class of each instructor was observed per week, in rotation.

The student status of the ethnographer proved far greater an asset than a liability in permitting access to and confidence of informants. Her lac of fluency in the Spanish language proved similarly an advantage. ': was able to fit into the classrooms unobtrusively and to participate in the experience along with the students--an ideal situation f i a participant observer.

3.60 RESULTS FOR THE PILOT PROJECT.

3.61 Entrance Questionnaire.

In the Pilot Study, the ages of students were those typical for C. U. undergraduates, 81% of the students being from 18-23 years-old. As for grade level, 18% were freshmen; 27% were sophomores; 33% were juniors and 15% were seniors--a total of 93% regular college students. 85% of the students were enrolled in the College of Arts and Sciences which requires 3 semesters of a foreign language, 57% were males.

The distribution of grade point averages supplied by each student was also typical of C. U. undergraduates.

Somewhat less than 3% of the students had prior experience with the Spanish language that was judged sufficiently extensive to cloud the experimental results. All such students were dropped from the analysis. Exclusion from the sample was based on either 1) reported extensive experience with Spanish or 2) very high pretest scores.

The family income/personal income question was not analyzed since (a) 15% of the students declined to answer the question and (b) the PSC concluded that any import of the answer for the project would be better drawn from G.P.A. responses.

3.62 Ethnographer's Report and Project Records.

STUDENT ATTITUDES. Although some students from the pilot project expressed appreciation for aspects of the course that were introduced by the project, especially the CAI labs, the few expressions about being in the project as such were mostly negative. Expressions of attitude toward the experimental methods were mixed. The clearest difference was the pattern of opinions about the effective and pedagogical value of the lab sections. Typical ratings for the three can be ranked as follows:

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(1) CAI: well to very well liked and appreciated.
                    (14% negative comments on exit questionnaire)

        (2) Audiotapes: mildly negative to mildly positive.
                    (26% negative comments)

        (3) Tele-lessons: neutral to very strongly disliked.   .
                    (62% negative comments)

The tele-lessons did not .receive as high a rating as expected. The

primary criticism was related to the the poor acting of the people in

the films. This should have been expected as none of the actors were

professionals nor were funds available for hiring professional

personnel. Another criticism was that reception was at times poor.

Attendance seemed to correlate rather highly with these opinions.

        ATTENDANCE AT RECITATION SECTIONS. The Exit Questionnaire

indicated that most students felt the recitation sections were the

most enjoyable and most useful part of the course. The ethnographer

reported that all recitations were generally well attended. Later in

her report she offers a possible explanation of why the recitations

were so well attended:

        Since the TAs were all graduate students not far removed
        from their own undergraduate days, they were almost the
        students' peers. This relationship was illustrated by
        the level of comfort the students displayed when talking
        with their TAs. Students and instructors often shared
        personal information which revealed many similarities in
        interests and activities. This level of rapport may have
        contributed significantly to students' perceptions of
        the benefits of recitation.
        ATTENDANCE AT LECTURE SECTIONS. In contrast with the recitation

sections, the lecture sections were generally not well attended, as

reported by the ethnographer. Participant observation and informal

interview of students also revealed that students' comments about

lectures were quite negative and that the TAs, as well, felt that some

improvement could be made to the lecture portion of the class.

Lecturing was done in English and with the use of an overhead

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projector. Lecture sections were large and the ethnographer felt that perhaps this setting was not optimally conducive to learning.

At first glance this all seems quite straightforward; however, the project Director suggested a number of reasons that can be proferred for this lack of attendance at lecture but high attendance at recitation:

1. Attenance is taken in recitation. After three absences, a student's score drops one letter grade. This is a policy which the professor enforces for the recitation sections but not for lecture.

2. Recitations are small (18-22 students) while lectures are large (75-100 students) and absent students are not missed. In addition, the small recitations are more conducive to getting to know the students as individuals.

3. TAs, though instructed not to spend recitation time explaining material that had been presented in the lecture, were, in fact, observed by the ethnographer to be quite willing to provide such redundant explanations, thus removing any real danger of missing essential material by skipping lectures.

4. Oral participation is a major portion of the recitation grade; there is neither an oral grade nor oral participation in lecture.

These reasons seem to be very conducive to attendance at recitation. An interesting note is that there is always perfect attendance at lecture when there is an exam! One lecturer who instituted frequent "pop" quizzes as part of his lecture syllabus has excellent class attendance.

LABORATORY SECTIONS. Laboratory sections were attended roughly in

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proportion to the students' attitudes discussed above. The CAI and Tele-lesson labs were both at 100% attendance initially, but attendance dropped off to about 45% in the fourth week for the tele-lesson sections, and continued poor for the remainder of the semester. Attendance at the CAI labs remained high (97%) throughout the semester. Attendance at the audiotape labs was mediocre (an average of 65% attended in any one week) as was typical in the several years preceeding this project.

FURTHER OBSERVATIONS. The ethnographer reported striking differences among the recitation sections. Each section reportedly seemed to have its own personality and this developed early in the semester. Each TA had one relatively dull and one relatively lively recitation section; section 012 was apparently the most highly movtivated of the eight sections, being both active and participatory. The TA responsible for this section, as well as the TAs resposponsible for the other three lively sections, did not mask their enthusiasm for these more exciting, more motivated groups, though they stated that they did attempt to give equal instruction to all sections.

Since each of the TAs had one lively and one dull recitation, the ethnographer concluded that differences among the TAs in personalities and teaching styles were unlikely to be a major cause of difference in "class personality". Time of day and other possible determinants were also tentatively excluded as major causes. There was some evidence that "assignment to a computer group resulted in high motivation."

Overall, the ethnographer's conclusions on this issue may be summarized by her declarations that "It is unlikely that any single factor made up the class personality." and "This difference in class personality was due [,rather,] to a combination of factors including

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chance assignment of particuar students to particular sections."
(Appendix D.)

3.70 STATISTICAL ANALYSIS OF PRE AND POST TEST MASTERY SCORES.

Item analysis and discrimination analysis indicated that the
mastery test was appropriately reliable and capable of distinguishig
relatively accomplished from relatively unsuccessful students. There
was, however, some room for improvement, and some aspects of the test
are being modified for the second semester of the experimental course.

Statistical comparison of the pretest and posttest scores for the
three groups showed large and significant increases in the mean total
scores and subtest scores for each of the three conditions (CAI,
tele-lesson and audiotape labs), but no significant differences
among the three conditions in any aspect of mastery (total or
subtests). This was true even when analysis of covariance was used as
the statistical method, with pretest scores as the covariate.
(Analysis of covariance was used to correct for any group-average
differences in level of mastery at the beginning of the semester that
might have been caused by sampling error.) A few specific comparisons
approached, but did not reach, the 0.05 level of significance
(two-tailed), but with so many comparisons, that would be expected to
occur quite often by chance alone.

In summary, it is clear that the statistical comparison provides
no evidence for a measurable advantage of the tele-lessons or CAI as
they were used in this first semester of our project, over the
traditional audiotape labs. That is to say that, in this pilot study,
they were not reliably more effective nor less effective than the
traditional audiotape labs, as measured by the objective mastery test
scores.

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3.80 CONCLUSIONS FOR THE PILOT PROJECT.

The study showed that the experimental groups achieved as well as the control groups and that despite the negative attitudes of the tele-lesson sections towards their particular form of self-paced. study, these lessons did not, in fact, hamper their learning. On the other hand, the statistics showed no evidence that any of the language skills could be better taught using either computer or tele-lesson assisted instruction.

Since the work of the first semester was intended as a pilot study, a trial run for testing the instruments and design to be used in the second semester, no further general conclusions about the application of new educational technologies to foreign language teaching were warranted. Rather, the knowledge gained from the trial run was applied to the intended refinement of the experimental design in preparation for the second semester's experiment. A synopsis of the design and materials changes to be made is given below, together with the reasons for the changes.

IV. DESIGN REVISIONS FOR SECOND SEMESTER.

4.10 Changes in the labs.

The most striking result of the pilot experiment was the overwhelmingly negative response of students assigned to the tele-lessons. Although the computer labs were judged more favorably than the traditional tape labs and were attended more faithfully, the latter were received quite well with an acceptable range of attendance. The tele-lessons, however, were strongly criticized by a majority of students and attendance at labs was poor. The favorable response to the CAI labs shows clearly that the students' revolt

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against the tele-lessons must be attributed to some factor other than a general negative reaction to innovation. That contrast led to an evaluation of the tele-lessons, with the aim of discovering why the response to that particular mode of presentation had been so negative.

Given the original intent of the project, to evaluate the tele-lessons (TL) and the CAI labs as possible enhancements of the Spanish curriculum, it was, of course, necessary to consider the possiblity that TL are simply not suited to the task of teaching foreign language at the college level, for motivational reasons at least. However, examination of the content of the particular TLs used in the course led the project staff to consider seriously another possibility.

In general, although a few of the TLs were notable exceptions, the majority were judged to be of poor quality. Even the best portions, the dialogues and culture presentations, were amateurish; the speakers and "actors" were, in fact, not professional actors, though they were all native speakers of Spanish. The drill sections were judged to be quite poor, and some serious doubt was expressed as to whether TLs would be an appropriate vehicle for drills even if they were done professionally. The CAI labs were judged to be quite superior for drills.

Since neither funds nor time were available for developing TLs of professional quality which could be coordinated with the text content before the scheduled experiment in the second semester, the project staff decided that the TLs should be dropped from the experimental design. It should definitely not be considered a conclusion of this project that TLs have no potential as enhancements of college level foreign language instrucion. The conclusion is, rather, that the TLs

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available for the pilot experiment were of sufficiently poor quality to warrant their removal from the project. Because of low appeal to students and low attendance at these labs, no valid general conclusions can be drawn as to their value at this time.

Dropping the TL component allowed the 2nd semester experiment to utilize four sections each of CAI and audiotape labs. The sections exempted from taking the mastery test as a pretest were also scheduled to be dropped as there was no evidence that the use of the Mastery Test as a pretest in any way affected the results of the posttest.

One problem noted in the pilot semester that resulted from the manner in which the labs were assigned was that the students assigned to the CAI labs had no opportunity for private oral practice of pronunciation using native speakers as models. Therefore, it was decided that in the second phase of the experiment, all students would spend some time in the audiotape labs. The revised schedule would be as follows:

Control group: 3 sessions (30 min. each) audiotape lab.

CAI group: 1 session (45 min.) computer lab.

1 session (45 min.) audiotape lab.

4.20 Attendance.

Another major change in procedure, that could affect both the lab sections and the lectures, was the installation of controls designed to insure attendance at nearly all sessions by a majority of students. A problem with the pilot study, from the point of view of experimental design, was this: If the only difference among the experimental conditions is the mode and content of the lab sections, the design is vitiated by common failures of attendance at the labs. Also, the major intended goal of the recitation sections, which was to gain more

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conversational practice, was undermined by the willingness of TAs to review grammar information for students who had missed that material by failing to attend lecture.

In order to give the student a clear and consistent message.that doing well in this course, an indeed _passing_ the course, would require regular attendance at lecture, recitation and lab sessions, it was decided that the following procedures were to be implemented in the second phase of the experiment:

1. Both the audiotape labs and the CAI labs wwould be monitored for attendance, and grading penalties would assessed for missed labs. The audiotape labs would be monitored by members of the project staff, who would be charged to determine not only attendance, but activity in the lab (so that checking in to the lab for a session of chemistry homework became impossible!). The computer lab would be monitored by the computer itself which monitors both attendance and performance.

2. Attendance at lectures would be encouraged by two (grade relevant) procedures:

    a. Random, frequent quizzes would be given in .ecture sections. Scores on these quizzes would determine a substantial portion of the final grade.

    b. TAs would be absolutely forbidden to give coaching on grammatical information missed by skipping lecture. Presence of the ethnographer, plus regular meetings with the TAs, would ensure that this injunction was obeyed.

3. Since recitation sections have been traditionally well attended, and since part of the final grade has always been dependent on oral performance in recitation sections, no special changes were

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needed to insure attendance of recitation sections.

4. Students who had missed a significant number of sessions of any
aspect of the course by the end of the university drop/add period
would be councelled to drop the course. Remaining students who
had accumulated a substantial number of absences from any aspect
of the course by the end of the semester would be excluded from
the statistical analysis of the results of the experiment.

4.30 Instruments.

From the perspective of the original questions of the project,
the mastery test used in the pilot study was judged to require
revision. Specifically, the questions ask whether the new methods are
more effective in teaching some aspects (speaking, listening, writing
or reading) of the Spanish than the traditional audiotape. Since the
mastery test used in the pilot study contained some subtests that were
mixed-skill tests, answers to such questions were impossible. For
example, a portion of the listening test required not only listening
comprehension, but ability to comprehend the correct written
response. The test battery was redesigned to provide relatively pure
tests of speaking, listening, and writing. The reading test was felt
to be "pure".

It was decided that several questions be dropped from the
Entrance Questionnaire since the items they dealt with were judged by
the project staff to be either inappropriate or unnecessary to the
study based on the results gatherered.

It was further decided that the portions of the Exit
Questionnaire that pertained to evaluation of various aspects of the
course should be be redesigned in such a way that the students could
rate each portion on a scale of one to five rather than select the

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aspect that they felt was the most effective. This should give a more accurate and complete picture of the students' attitudes toward each portion of the course: labs, lecture, recitation sessions, design.

Negotiation with the University of Colorado Human Subjects Committee were to be undertaken to determine if informed-consent access to GPA records could be used as a covariate in the analysis. If approved, the Registrar's records would be used for that information for those subjects who signed the consent forms. If not approved, the GPA covariate would be dropped from the design.

4.50 Recitation.

In the pilot study, the TAs were given the responsibiltiy of planning recitation sessions, drilling or using in conversation all grammatical structures and culture covered by lecture. It was decided that in the design for the second phase of the research project, the Project Director should design the lesson plan for each day of recitation, in order to provide for a more uniform coverage of the recitation material by the TAs.

Since there would be only one experimental condition, each TA should have one control and one experimental class. All the TAs for the recitation section should be native Spanish speakers with one exception. This exception is considered by native speakers to speak Spanish as well as native speakers.

4.60 Overall.

It was expected that the design revisions given above would provide an experimental environment that would allow clear interpretation of whatever results might be forthcoming and that the second semester of the project would specifically provide valuable insights into the question of whether CAI labs can effectively enhance

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the teaching of foreign language at the college level.

V. THE EXPERIMENT BEGINS

5.10 Preparation

Before the beginning of the fall semester the materials to be used (mastery test, questionaires, software) were modified according to the guidelines discussed in section IV. Copies of the modified Mastery Test and the Entrance and Exit Questionnaires are included in Appendices B and E respectively. About this same time the TAs who were to participate in the research project were selected for the recitation sections.

Two days before the beginning of classes the project staff met with the TAs to explain the experiment and to discuss how the course would be conducted. The Ethnographer explained her role in the project. She explained to the TAs that she would be coming to the recitation classes, why she would be there, and she hoped her presence in the classes would not be intimidating.

The TAs were informed that they would be required to teach according to a lesson plan to be provided by the Project Director. For the first half of the semester the lesson plan for each day's class was indeed provided by the Project Director, but during the second half of the semester the TAs were asked to share the responsibility of preparing the common lesson plans.

The use of lesson plans was instituted as a means of ensuring that all recitation sections would, as much as possible, cover the same material and devote roughly equivalent amounts of time to the various activities (drill, dialogue reading and questions, guided conversation and free conversation). The Project Director made

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unannounced visits to all the classes periodically to check the uniformity of the teaching. The Ethnographer reported that, nevertheless, the TAs did not always follow the lesson plans carefully and that indeed, occasionally it was difficult to discern that the different sections were using the same lesson plan on the same day.

5.20 Laboratory.

On their first day of classes, students were taken to the audiotape lab and given a 30 minute "hands on" instructive lecture on the use of the tape recorders and the procedure for checking out and returning tapes. The students were required to sign up for specific laboratory times according to their assigned laboratory method. Audiotape-only students had to sign up for a total of 90 minutes per week of audio lab; the computer-and-audio students signed up for 45 minutes per week of audio lab and 45 minutes per week of computer lab. Students actually started using the audio lab after the first 1 1/2 weeks of the course. The computer students were given a class to train them in the use of the computer lab. Use of the computer lab began during the third week of classes for the same reasons as in the pilot study.

It should be noted that the number of different time slots available to the students for the labs was quite limited (36 half hour periods per week), since the TAs were obliged to do the monitoring, scheduling it around their own teaching and class sdchedule. The decision to monitor attendance at the audio labs was made after our experience with the spring semester students, who often clocked in and left for the hour or studied other subjects. Since funds to pay the monitors were limited, a more flexible schedule for the labs could not be provided. This resulted in a situation in the audio lab that was

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very much different than in the prior semesters. The typical pattern had always been that the students would come to the lab whenever they chose during a wide selection of hours (roughly 8 to 5 and 7 to 9 daily except Saturday and Sunday). Typically, only a handful of. students would be using the lab at any particular time and often they clocked in and left. During the semester of the experiment the labs were nearly full (20-30 students) at most of the times available to the students in the Spanish course. This led to complaints by the students (see below) and by the Audio lab director who pointed out that his work-study students had to make many more copies of the lesson materials than would normally have been necessary. But it did ensure that students were indeed using the audio lab.

The computers, too, had to be tightly scheduled because only 2 machines were available for the roughly 100 students in the computer-plus-audio-lab sections.

5.30 Data gathering

Unlike earlier researach designs which used global examinations to measure proficiency, this research project used skill-specific measurements of reading writing, speaking and listening. The Mastery Test was given as a pretest during the second week of classes and was used to gather baseline information with which to compare subsequent test data.

During the third week the Entrance Questionnaire was administered. The students were given an information sheet explaining the nature of the experiment and stating that they were not required to fill out the Entrance Questionnaire. This questionnaire was the same one administered to the pilot project except that it did not ask the students for a salary range.

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An exit questionnaire was administered to all students
participating the the research in the penultimate week of classes.
This questionnaire served as an evaluation of the course by the
students. Some modifications which we hoped would ensure better.
comparative data were made on this instrument after our experience
with it in the pilot study. It is as a result of the overwhelmingly
negative evaluation that the tele-lessons received on this
questionnare that they were eliminated from the study.

As in the pilot study, the mastery test was given as a posttest
on the scheduled final exam day. The listening comprehension portion
of this test was reflected in the final grades. The remainder of the
test was used only by the researchers.

The Ethnographer began attending classes during the third week of
classes; the Project Director began spot checking the teaching
methodologies on the first day of classes.

5.40 TAs

The project director had very little authority as to who would
teach the 101 sections except to require that they all be native
speakers. As a result, at the beginning of the semester, there were
problems with both of the male TAs, neither of whom had as much
teaching experience as the two females. The Project Director
initially requested that the Spanish Department replace one of the
male TAs with a more experienced TA, but although the change was
approved at the department level the dean refused to allow the change
to be made. Therefore the Project Director began very carefully
guiding both males in various teaching skills, sometimes taking over
their classes to demonstrate a particular technique. The skills of
one of the males improved greatly and rapidly throughout the semester,

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but the skills of the second male remained somewhat weak.

The scientific coordinator expressed concern that both of 2nd TA's sections might have to be dropped from the study. However, the statistical analysis showed no differences on any measure between any of the TA's, and the scientific coordinator allowed the data from the questionable sections to be combined with the others.

5.50 Results of Statistical Analyses of Test Scores and Questionnaires

5.51 Covariates

In contrast to the first semester pilot in which several students had to be dropped from the sample because their pre-test scores were higher than the mean post-test score, there were no such problems in the second semester. It apears that the new placement test that was introduced by the department of Spanish and Portuguese in the summer was quite successful – the highest score on the pre-test was over four standard-deviation units below the mean post-test score. Figure 1 shows the distributions of scores on the two administrations of the test. Note that there is no overlap between the pre-test and post-test distributions.

The narrow range of pre-test scores indicated that none of the students had appreciable prior knowledge of Spanish at the level tested by the mastery test. Thus there was nothing to be gained by using pre-test scores as a covariate in the analysis. The other main candidate for use as a covariate was GPA, but that could not be used either. Roughly a third of the students who filled out the entrance questionnaire declined to respond to that item. Losing those students from the sample, and losing as well the students who never filled out

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the questionnaire, was judged too high a price to pay for even a strong covariate. Further, when the Registrar's office was approached in an attempt to obtain official GPAs, it became clear that consent forms would be required from all students. That information came too late to be useable except as a suggestion for further research.

None of the other candidates for use as a covariate were deemed strong enough to warrant their inclusion in the analysis, and accordingly, analysis of variance with no covariate was selected.

5.52 Test Scores

Test and subtest scores were subjected to between-groups analysis of variance (ANOVA). The scores included in the analysis were the posttest total score, four subtest scores from the posttest (reading, writing, speaking and listening), the semester total for recitation quizzes, and a subtest score from the instructor's final exam that was intended to provide a relatively pure measure of grammatical competence. As a preliminary check the experimental and control sections were combined for each TA and a one-way between-groups ANOVA was computed to determine if any differences in scores could be attributed to differences among the four TAs. There were no significant differences among the TAs on any of the tests or subtests. Thus it is statistically legitimate to combine the students from the different TAs' recitation sections into the two large experimental and control groups intended in the design. Accordingly, for each of the score variables a one-way between-groups ANOVA was used to determine if any differences were present that could be attributed to the difference in the laboratory methods.

The results of the statistical analysis of test scores can be summarized quite simply. There were absolutely no differences of

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consequence between the groups on any of the test or subtest scores except for the writing skills.subtest. On the writing skills test the difference between the groups was both large and highly significant, as can be seen in Table A:

Table A: Between Groups Comparison of Writing Skills Subtest

GROUP	N	MEAN	S.D	D.F	F	P
EXPERIMENTAL	69	30.4	4.8	1	13.5	.0003
CONTROL	64	26.7	6.4			

The experimental group attained scores on the writing subtest that averaged almost one-half standard-deviation unit above the average score for the control group. In a course that was graded "on the curve" that would mean that the average student in the experimental group would receive a full letter grade higher on that subtest than the average student in the control group. The significance level ("P" in the table) indicates, in laymen's terms, that a difference of that magnitude would happen by chance less than one time in three thousand experiments if the samples were drawn from a population in which there was, in fact, no difference between conditions. In other words, it is highly unlikely that the difference obtained is not a real one.

Other aspects of the results suggest that this superiority of the experimental group on the writing subtest probably resulted from the intended difference in the laboratory methods and was most likely due neither to sampling error nor to differences between the two sections other than the difference in laboratory methods. In principle, sampling error could have randomly resulted in an experimental group composed of better students, on the average, than those assigned to

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the control group; or the actual conditions of the course might have been better for the experimental group in a way that had nothing to do with the difference in labs (for example, the lecture for the experimental group met earlier in the day--university folk wisdom holds that earlier classes tend to be better classes, other things being equal). However, none of the analyses that could reveal such a bias if it were present gave any indication of a difference in the composition of the groups. There were no differences between the groups on any of the test-score variables other than the writing subtest discussed above; further, there are no differences on the exit questionnaire except for items that are directly related to the lab method.

If either the students or the class setting were superior in the experimental section it would be expected that the superiority would result in a ...ore or less general advantage in performance. Yet no between-groups differences were found for any of the test score variables other than the writing subtest, as can be seen by examining Table B. None of the comparisons indicate differences even approaching significance. It is thus clear that the performance of the students in the experimental group was superior only on the writing subtest.

Table B: Between Groups Comparison of Six Test and Subtest Scores

VARIABLE	GROUP	MEAN	S.D	D.F	F	P
POSTTEST	EXPERIMENTAL	92.1	12.3	1	2.1	.15
	CONTROL	88.3	17.4			
LISTENING	EXPERIMENTAL	9.97	2.32	1	.050	.82
	CONTROL	9.88	2.62			

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READING	EXPERIMENTAL	10.30	2.03			
	CONTROL	10.25	2.20	1	.022	.88
SPEAKING	EXPERIMENTAL	41.4	7.61			
	CONTROL	41.4	11.0	1	.0001	.99
QUIZZES	EXPERIMENTAL	43.8	56.4			
	CONTROL	42.5	68.5	1	1.5	.22
GRAMMAR	EXPERIMENTAL	54.3	16.8			
	CONTROL	55.8	15.1	1	.27	.60

Not only do none of the effects even remotely approach significance, but none of the differences is larger than a tiny fraction of a standard-deviation unit except for the Postest Total Score which includes the Writing Subtest.

5.53 Exit Questionnaire

Further evidence that the experimental and control groups were equivalent except for the difference in lab methods was revealed by the analysis of the Exit Questionnaire. As with the test results, we can easily summarize most of the results of the Exit Questionnaire by pointing out that the responses of the two groups were nearly identical on all questions except for those questions that were specifically relevant to the difference between the lab methods. So, for example, the quality ratings for the course as a whole, the TAs, and the texts were the same for the two groups. But the computer-plus-audio group was less positive about the audio lab than was the audio only group (audio only: 63% positive, 37% negative; computer-plus-audio: 46% positive, 54% negative). The difference

between the groups was marginally significant, statistically (chi-square = 4.21; p = .04). Furthermore, the computer-plus-audio group was very much more positive about the computer lab (92% positive, 7% negative). The difference in the ratings of the two labs by these students was highly significant, statistically (chi-square = 41.2; p < .00001).

Another difference between the groups in the pattern of responses on the exit questionaire, again related to the difference in labs, appeared in the responses to four questions of the form "The lab method I was assignd to was very good for developing good Spanish listening skills [speaking skills, reading skils, writing skills]". Responses were "a. strongly agree", "b. mildly disagree", or "c. strongly disagree". While there was no difference between the groups in the pattern of responses for questions relevant primarily to the audio lab (speaking, listening), the groups differed in the pattern of responses to he questions that seemed relevant to the computer lab (reading and writing). The students assigned to the computer-plus-audio lab were more positive about the value of the lab for developing reading/writing skills than were the students in the audio only labs.

Aside from the lab related questions like those discussed there were no differences between groups in the pattern of responses to questions. One apparent exception in fact is another instance of the general pattern. The apparent anomaly was a significantly more positive rating of the instructor by the computer-plus-audio lab students than by the audio only students (chi- squared = 7.75, p = .005). The anomaly was resolved when it was noted that the computer-plus-audio students were of the lecturer's role in preparing

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anu upgrading the computer lab software. Thus it appears that, unexpectedly, the lecturer ratings were lab related.

5.54 Rationalizing The Results

In our hypothesis it was expected that the computer-plus-audio lab method would enhance writing and reading skills as well as grammatical competence. A similar "prediction" was made by the students in their responses to the Exit Questionaire. Although the two groups gave nearly identical responses to most of the questions, the students in the computer-plus-audio lab were more positive about the expected benefit of their lab method for developing good Spanish reading and writing skills.

With one of three expected gains so strongly confirmed, the question naturally arose: "Why this one and not the other two?". The experimental design was not addressed to this question so we can merely speculate. As for the difference between writing and reading, we might consider the difference in the cognitive demands of the two tasks: writing demands recall of the relevant syntax and vocabulary, whereas reading requires only recognition of those elements. Recall has been almost universally shown in hundreds of experiments, in linguistic and other domains, to be much more difficult than recognition. Since the computer drills gave practice in recall, it may have been that the opportunity to practice the more difficult form of memory gave an enhanced advantage to the Spanish skill that requires that form of memory support.

5.55 Conclusions

It is clear from the results of the study that students do very much appreciate the computer lab, much more so than they appreciate the audio lab. This is especially true for the students who had the

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opportunity to use both lab methods. It is also clear that, for the limited range of skills toward which the computer labs were aimed the computer labs were effective in increasing student performance. What should we make of these findings?

We can speculate that the difference in students' appreciation of the labs, their attendance (as seen in the spring semester pilot), and the labs' effect on their test performance arises in part from the interactive quality of the computer lab. The computer lab gives immediate feedback: the tape lab gives no feedback (although the workbooks are eventually corrected and returned).

5.56 Specificity of Benefits

One clear outcome of the study contradicted certain of the predictions expressed in the hypotheses. It was predicted that the enhanced learning of the material drilled in the computer lab would generalize to other aspects of the complex of Spanish language skills. In fact, the computer lab enhanced only a particular skill (writing) that was specifically supported by cognitive demands of the exercises. Thus, it would seem that for the computer lab to provide the full benefit which it promises, lab exercises would need to be developed for all skills.

The absence of the predicted advantage even for skills that were expected to be enhanced by the computer lab experience (reading and grammar) suggests that the cognitive demands of specific language skills must be carefully analyzed, together with the cognitive demands of any computer-based exercises that are intended to enhance those skills. This would seem to be an area ripe for collaborative efforts involving specialists in Spanish teaching, cognitive psychologists, cognitively oriented educational psychologists, and CAI specialists.

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VI. Vision

The success of this limited application of CAI to introductory college-level Spanish teaching naturally leads one to ask how the current application could be productively extended. We can project several different ways: first would be the relatively simple extension of computer laboratory drill excercises of the sort used in this project to more advanced courses in the Spanish curriculum and to courses in other language curricula. There would seem to be no obstacle to such extensions except for the substantial amount of work involved in producing the appropriate courseware. A second and more difficult extension would be to broaden the range of exercises presented so as to foster other skills and other aspects of the writing skill. Such an expansion would be more difficult because it would require careful examination of the cognitive demands of the skills to be taught plus evaluation studies like the current project to determine if the exercises are indeed effective. Those two expansions depend only on the current CRT-display/keyboard- response mode of interacting with the computer. A third level of expansion would be to adopt the available speech processing technology to replace the audio tape labs with computer based interactive language labs.

The third extension leads to what we might call a Spanish lab study station. The computer could interact with the student in any of the pedagogical modes except free conversation. Using current speech processing technology, the computer could replace the tape lab, providing via digital recording techniques both the Spanish lab model and a recording facility for the students imitations. Imitations

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could be compared with the model without the rewinding of tapes.
Typed responses to computer speech audio presented questions could be given immediate interactive feedback. It should be emphasized that such a lab could be implemented with current speech processing technology. For example, the ICS Speech Processing Facility is developing work stations for speech research based on IBM PC ATs. Each PC AT includes A/D speech input and D/A speech input capacities at a cost of roughly $2000 per station.

The Spanish language study station envisioned would later be enhanced by incorporating computer-based speech recognition capacities. Although adequate technology is not presently available, it should be in a few years. The problem of computer speech recognition in the context of language training exercises poses a much easier problem than the general problem of recognizing connected speech, since in most instances the computer can be given a specification of what the student should say (we are not yet envisioning a device that would replace the human conversation in the recitation section). The combined system would allow the computer to respond to the students' attempts at all four modes: reading, writing (typing), listening, and speaking. The responses could be printed on the screen or spoken by the speech output system. The four extentions, taken together, would provide an optimum learning environment roughly equivalent to providing a personal expert Spanish tutor for each student. Such a system would allow recitation sections to be devoted totally to conversation, while the "lecturer's" role could be concentrated on monitoring course quality in the manner of the Project Director during the present study.

A further enhancement of the Spanish study station would be the

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incorporation of video in the manner of the tele-lessons using videodisk technology. Although our pilot study yielded dismal results for the telelessons, our conclusion was that the trial gave no information about the potential of telelessons since the ones we used were, on the whole, so poorly done. Further, the telelessons were not interactive, while videodisk telelessons could be interactive.

There are compelling reasons for believing that an interactive audio-video study station would be even more effective than the level 4 study station envisioned above. It is well known that speech perception is easier if the perceiver can see the speaker's face and even easier if non-verbal gestures can be viewed. The study of the acquisition of communication skills in children has revealed that it is the process of communicating that leads to advancement in the level of communicative skill. What that implies for the pedagogy of second-language skills is that the student should be moved past the stage of panicky hesitation into the beginnings of actual communication as quickly as possible. Since audio-video presentations are easier to understand, the transition to successful comprehension should be accelerated by their use.

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TAs: PLEASE READ THE FOLLOWING INFO TO THE STUDENTS
      BEFORE DISTRIBUTING THE QUESTIONNAIRE.

The Department of Spanish and Portuguese periodically surveys currently enrolled students in order to better evaluate their needs. In addition, this semester (Fall, 1984) the Department is conducting research related to two different laboratory methodologies for teaching Spanish.

Since many factors (variables) may affect the research results, we would like to gather some information in order to better establish the final conclusions of the research process. The information requested in the attached questionnaire will be very useful in this research and, although it is not obligatory for you to answer the questionnaire either in full or in part, the Spanish Department would very much appreciate your cooperation in this matter.

Please be aware that the information will be treated in aggregate form for statistical use only. No individuals can be identified directly, <u>nor will this portion of the research in any way affect the course grade.</u> Your student ID# requested at the top of the questionnaire may be any code that you alone will recognize. In the event that you should drop the course, this code will permit the researchers to pull your questionnaire.

Thank you for your cooperation.

DEPARTMENT OF SPANISH AND PORTUGUESE

ENTRANCE QUESTIONNAIRE

Course_____ Section #_____ Student ID #_____

Age (years and months)_____

ETHNIC BACKGROUND (Circle one)

       Spanish Origin: 1. Mexican   Nonspanish: 5. Caucasian

                     2. Chicano   6. Black

                     3. Latin American   7. Oriental

                     4. Other   8. Other

WAS SPANISH SPOKEN AT HOME DURING YOUR CHILDHOOD?: ___YES ___NO

ANNUAL FAMILY INCOME: (circle one)

FAMILY RESIDENCE:

   1. U.S.A.: Town/City_____ State_____

   2. Other Country:_____

YOUR GRADE LEVEL:

   ___ Freshman   ___ Senior

   ___ Sophomore   ___ Masters student

   ___ Junior   ___ Doctoral student

   ___ Special Student (please explain)_____

YOUR CUMMULATIVE GPA: _____

Are you in the College of Arts and Sciences? ___ Yes ___ No

    If "No", in which college are you enrolled?_____

    What is your intended major?_____Minor?_____

PREVIOUS SPANISH KNOWLEDGE: (Circle <u>all</u> grade levels in which you studied Spanish.)

    Middle School: 7th   8th   9th

    High School: 10th 11th 12th

    C.U. Boulder: 101   102   105   211   212

    Other institution: (semester) 1st 2nd 3rd 4th

    Other Spanish courses (please specify)_____

THIS COURSE IS: ___An elective ___A requirement ___Personal interest

I HAVE STUDIED OR LIVED IN A SPANISH SPEAKING COUNTRY: ___Yes ___No

If "Yes",, how long, where, how many times (please explain).

1. _____   _____   _____
    years   months   where

2. _____   _____   _____
    years   months   where

EXIT QUESTIONAIRE

The following questions will help us to evaluate the Spanish 101
course and thus better to serve your future needs. Please read and
answer ALL of the questions carefully.

1. My assigned language laboratory method was
    a. Language listening tapes only.
    b. Microcomputers and listening tapes.

2. If I had a choice I would prefer a different instructional method.
    a. No
    b. Yes, language listening tapes only.
    c. Yes, microcomputers only.
    d. yes, listening tapes and computers.

3. My attendance record at my assigned language lab was
    a. Very good (attended all of the time).
    b. Good (attended most of the time).
    c. Medium (attended half of the time).
    d. Poor (attended less than half of the time).
    e. Very poor (never or almost never attended).

4. Assignments performed in the language laboratory were useful.
    a. Strongly agree
    b. Mildly agree
    c. Mildlly disagree
    d. Strongly disagree
    e. No opinion

5. Assignments performed in the computer laboratory were useful.
    a. Strongly agree
    b. Mildly agree
    c. Mildly disagree
    d. Strongly disagree
    e. No opinion

6. Instruction for use of the computer lab was sufficient.
    a. Strongly agree
    b. Mildly agree
    c. Neither agree nor disagree
    d. Mildly disagree
    e. Strongly disagree

7. Instruction for use of the audio lab was sufficient.
    a. Strongly agree
    b. Mildly agree
    c. Neither agree nor disagree
    d. Mildly disagree
    e. Strongly disagree

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8. SPEAKING SKILLS: The lab method I was assigned to was very
    good for developing good Spanish speaking skills.
    a. Strongly agree
    b. Mildly agree
    c. Neither agree nor disagree
    d. Mildly disagree
    e. Strongly disagree

9. WRITING SKILLS: The   was very good for developing good Spanish
    writing skills.
    a. Yes
    b. No
    c. No opinion

8. My method was very good for developing good Spanish listening
    skills.
    a. Yes
    b. No
    c. No opinion

9. My method was very good for developing good Spanish reading
    skills.
    a. Yes
    b. No
    c. No opinion

10. The course was coordinated with the language laboratory.
    a. Very well
    b. Well
    c. Medium
    d. Poorly
    e. Very poorly

11. Laboratory personnel at my assigned lab were helpful.
    a. Strongly agree
    b. Mildly agree
    c. Neither agree nor disagree
    d. Mildly disagree
    e. Strongly disagree

12. Laboratory services were readily available.
    a. Strongly agree
    b. Mildly agree
    c. Neither agree nor disagree
    d. Mildly disagree
    e. Strongly disagree

13. If I had a choice I would prefer a different instructional method.
    a. No
    b. Yes, Computer lessons
    c. Yes, Tele-lessons
    d. Yes, Language tape
    e. No opinion

14. The following had the greatest effect on my learning of Spanish.

   a. Recitation Instructor
   b. Method of instruction (computer, listening tape, tv)
   c. Scheduling of recitation (time of day, location, etc.)
   d. Other -- Please specify in the space provided on p. 3.
   e. No opinion

15. My attendance record at recitation was

   a. Very good (attended regularly)
   b. Good (attended most of the time)
   c. Medium (attended half of the time)
   d. Poor (attended less than half of the time)
   e. Very poor (never or almost never attended)

16. I completed recitation assignments

   a. All of the time
   b. Most of the time
   c. Half of the time
   d. Less than half of the time
   e. Never or almost never

17. Do you feel your background for this course was

   a. Too much (the course was far too easy)
   b. Plenty (the course was fairly easy, but still presented
       some challenges)
   c. Sufficient (the course was challenging but not impossible)
   d. Too little (the course was very difficult)
   e. No opini n

18. Have you studied or do you speak any languages other than Spanish
    and English?

   a. Yes
   b. No

19. The grade I expect for this class is

   a. A
   b. B
   c. C
   d. D
   e. F

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PLEASE ANSWER THE FOLLOWING QUESTIONS IN THE SPACE PROVIDED FOR
WRITTEN ANSWERS.

20. What were the most effective aspects of this class?

21. What were the least effective aspects of this class?

22. How could the class be improved?

23. Please provide additional comments.

14.d

SAMPLE LESSON PLANS

LESSON PLAN

Week of September 10

Lunes 10 de Sept.

1. Tarea para el miércoles 12 de sept. (write on board; also remind them that it is on their syllabus.) (5 min.)

    a. p. 12-20 of the text.
    b. Read instruction on lab sign-up sheet and circulate so they can sign up. Has to be done today.
    c. Go over pronunciation of vocabulary on page 20. You say the word first and they repeat.

2. Warm-up exercise (5 min)

    -?Cómo se llama usted? as on 1st day of classes. Do this with 5 or 6 students only so they don't forget the phrase.

3. Finish "Lección Preliminar" from where ever you left off on Friday.

4. Do exercises A, B, C, and D on pp. 10 & 11 - BOOKS OPEN

    NOTE: there are other subjects written on the books of the cartoon on p. 10. Go over these with the students.

O V E R ---->

5. Preguntas: p. 11 - BOOKS CLOSED.

    a. Do each question with several students before going
       on to the next question.

       BE SURE TO REPEAT <u>THEIR</u> ANSWER <u>CORRECTLY</u> WITHOUT
       TELLING THEM THEY ARE WRONG. THEY WILL CATCH ON.
       FOR EXAMPLE:

       TEACHER: ?Qué estudias, Juan?

         Juan: Estudias español. (They will probably
                 answer this way since they haven't
                 yet learned verb conjugations)

       Teacher: Muy bien, Juan. Estudio español.

       Teacher: ?Qué estudias, María?

        Maria: Estudias biología.

       Teacher: Muy bien, María. Estudio biología.

By the 3rd student they usually catch on that they should
say "estudio" and you haven't had to explain grammar nor
speak in English. Grammar explanation will take place
tomorrow in Lecture.

-Do all the "Preguntas" in the same manner.

-DO NOT answer any question about grammar NOR speak in English
 during this drill time.

5. Pronunciacion, p. 11
   have them repeat after you the words with r and rr

DON'T FORGET TO RETRIEVE THE LAB SIGN-UP SHEET FROM THE
STUDENTS. I NEED TO HAVE YOUR SHEETS TURNED IN TODAY.

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Miércoles 12 de Sept.

1. Anuncios (en inglés) (5 min)

   a. Escriban la tarea para el viernes en la pizarra.

   b. Recuérdenles a los alumnos que no falten de la
       conferencia el jueves porque van a tener un examen
       (el mío) y un "quiz" de Kite sobre la cultura.

2. Write the minidiálogo (p.15) on the board to use a little
   later.

3. "Warm-up" - (5 min)

   - ?Qué estudias? como hicimos el lunes y que no todos usen
     el mismos sujeto...biología, geografía, español,
     matemáticas, etc.

4. P. 13 - LIBROS ABIERTOS

   - ejercicios B, C, D, E , F (SIN LEER lo que está en inglés,

     repetir después de que usted pronuncie cada palabra.

5. P. 14 - LIBROS CERRADOS

   - los ejercicios A, B, C, D.

6. El verbo "Hay" - LIBROS ABIERTOS

   - ejercicios E, F.

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LESSON PLAN FOR WEDNESDAY 9/19/84

I. Announcements (5 min)

   A. Write the homework for Friday on the blackboard: ·
      PLE 34-41

   B. Remind the students:

      1. If they didn't get to the computer training session on
         Tuesday (9/18) they need to go on Thursday between
         1:00 and 5:00 p.m. at Norlin 419S at their convenience.

         Except for the training session all computer labs are
         held in Hellems 159. There is NO sign-in sheet for
         the computer only. The computers monitor for us.

      2. All students should be signed up for audio labs by
         now. <u>Many are not attending lab.</u> This <u>will</u>
         affect their final grade. Lab is <u>not</u> optional.

      3. Students should be sure to take the brown lab manual
         when they attend the audio lab. Many are not taking
         it. It is nearly worthless for them to attend with-
         out it

      4. Students MUST sign in with the person proctoring the
         labs or they will be counted absent. (Initial the
         white sheet).

      5. Students should be doing lessons 3A, 3B, 4A & 4B this
         week and next.

II. WARM-UP EXERCISE: Verb drill (BOOKS CLOSED) - 10 min.

   A. Begin with a full choral response so that all students
      know what you expect in response.

   B. Give the infinitive form of the verb and the personal
      pronoun and gesture to the class to respond with the
      correct conjugated form of the verb. EXAMPLE:

      TEACHER: Vamos a conjugar los verbos,
      El verbo "mirar"..............yo. (gesture to
      indicate you want a full class response and say,
      "clase".

      CLASS: Yo miro.

   C. When you are sure that the students know what you are
      doing (after 1 or 2 verbs), ask individuals to respond.

      (It will help to use your best students first to give
      the slower ones time to catch on).

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D. Work ONLY with the following verbs-a warm-up is usually a review to make the students feel comfortable about something they can do. (Books Closed)

Mirar/ buscar/ llamar/ acompamar/ esperar .

III. DIALOGUE--p.32 (BOOKS OPEN) - 20 min.

A. TAs read the entire Spanish dialogue in normal speech and have the students listen.

B. Repeat each line for class repetition. Be sure to break long sentences into natural and meaningful breath groups.

C. Now practice the entire dialogue with 1/3 of the class assigned to each role.

IV. PREGUNTAS: p. 33

Try them with books closed but you will probably have to switch to books open.

V. PRONUNCIATION: p. 33:
- read aloud the sections on the pronunciation of Spanish "d",

then have them repeat the corresponding words after you.

VI. IF TIME PERMITS: p.41

- have them repeat the vocabulary on p.41 after you so they will have a little preparation for Friday's homework.

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LESSON PLAN 9/21/84 (Prepared by TA for all 8 sections)

1) Tarea: pp. 42-43 for class discusion on Mon.
           pp. 45-50 practica

2) WARM-UP EXERCISE: Verb drill (BOOKS CLOSED)-5 min.
   -er verbs   -ir berbs
    leer   abrir
    deber   vivir
    beber   escribir
    aprender   describir
    comprender

3) Substitution drill (10 Min.) BOOKS CLOSED

   1. Yo aprendo español en la clase.
      (tú, nostros, Ud., ellos, vosotras)

   2. Los estudiantes comen en la cafetería.
      (Leticia, Uds., tú, José y yo, Juan)

   3. Tomás escribe una carta.
      (Los Sres. García, Ud., Nosotras, tú)

   4. Ellos viven en el Perú.
      (tú, yo, la madre, unos amigos, vosotros)

4) Completion exercises.
   -ABRAN LOS LIBROS A LA PÁGINA 35.
   EXERCICIOS A yB (10 min.)
  **Salten los exercicios D y E amenos que tengan tiempo a
    fines de la clase.

5) EXERCICIO F: PREGUNTAS PERSONALES (10)
   1. Come Ud siempre en la cafetería?
        "   "   "   " casa?
        "   "   "   " la cafetería de C.U.?
   2. Lee Ud muchas novelas? muchos poemas?
   3. Vive Ud. en un apartamento? en casa? con amigos?
   4. Comprende Ud. bien al profesor? la lección?
   5. Debe Ud. comer menos? trabajar más? hablar menos?
   6. Abre Ud. la puerta a las mujeres? a los hombres?
        "   "   "   "   " los animales?

6) p.37 Práctica (5 min.)
   EJERCICIOS C y D: LOS NUMEROS 1-30 p.39 (5 min.)
   1. 3 y 5 son   8. 16 y 14 son
   2. 4 y 2 son   9. 8 y 8 son
   3. 2 y 3 son   10. 7 y 8 son
   4. 6 y 1 son   11. 30 menos 18 son
   5. 7 y 2 son   12. 15 menos 9 son
   6. 9 y 11 son   13. 7 menos 5 son
   7. 8y   9 son   14. 2 menos 1 son

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7) p. 39: How are the following numbers expressed in Spanish?
(5 min) BOOKS OPEN

1. 1 diálogo
2. 21 montañas
3. 13 puertas
4. 15 estudiantes
5. 6 clases

6. 21 países
7. 1 señora
8. 5 playas
9. 8 desiertos
10. 30 niños

P. 41:¿A qué hora estudia usted?
    - exercise at the top of the page.
    - Si les permite el tiempo, hagan tambien el ejercicio
      que sigue a este en la pág. 41.

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<u>Lunes 22 de octubre</u>   Espanol 101

1. (Drill) Repaso del clase anterior. Conjuga. When you do
   drill please do it with individual students rather than
   the class altogether.

   10 min   1. pensar   5. cerrar
             2. querer   6. recodar
             3. poder
             4. jugar

II. Terminar el material atrasado

III. Hacer ejercicio A (repaso pg. 94)

     10 MIN   LIBROS CERRADOS

IV. Hacer ejercicio B (repaso pg. 94)

 V. Hacer ejercicio C, manda a los estudiantes
    a la pizarra.

VI. Leer el voc. de la pág. 96 y que los estudiantes repitan.

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I.   Intercambios: Ejercicio A (pg. 95)

II.   Ejercicio B

III.   Hacer un repaso de todo el material incluido en el próximo examen.

      a) ojalá que

        esperar + verbo en el subj.:
        desear
        mandar
        permitir
        querer
        prohibir

      b) Repasar el significado y conjugación de estos verbos (EN EL INDICATIVO y EN EL SUBJUNTIVO)

hacer	pensar	recordar	encontrar
tener	querer	volver	mostrar
venir	cerrar	jugar	
saber	entender	poder	
decir	perder	costar	

      c) Repasar los numeros:
        1. En que año estamos?
        2. Cual es el ano que viene?
        3. A qué hora llegas a la universidad?
        4. Cuánto vale una casa?
        5. Cuánto vale un carro o coche?
        6. Cuántos dólares ganas al mes?
        7. Cuánto son 30 y 45?
        8. Cuánto son 90 menos 30?

        - Contar del 100 al mil (de cien en cien)
        - Contar del 1,000 al 10,000 (de mil en mil)
        - Cómo se dice en español "one million dollars"?
          (Un millon de dólares).

IV. Vocabulario

    Pregunta: Cuáles son los nombres de alugunas profesiones que ustedes saben? (puden usuar la que sigue.)

        abogado (a)   -en masc. y fem.
        aeromozo (a)
        enfermero (a)   -que es la diferencia entre esta palabra y enfermo ?
        gerente
        ingeniero

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```
                    maestro
                    médico
                    piloto          .
                    secretario

            División del tiempo        Dinero:   dólar
                    segundos                     centavos
                    minutos
                    horas             Diferencias:
                    días                         empleo
                    semanas                      empleado
                    meses                        jefe
                    años                         sueldo
```

VIERNES 10/28/84   LECCION 9

I. Warm-up Exercise (BOOKS CLOSED)
   -estas son preguntas personales y <u>NO USAN</u> vocabulario
   nuevo, asi que los alumnos DEBEN HACERLO CON LIBROS
   CERRADOS. No los necesitan.

   1. Cuántos alumnos hay en la clase?
   2. Tiene usted amigo en la clase?
   3. Recuerda usted el nombre del (de la) profesor(a) de
      español?
   4. Puedes estudiar bien en la biblioteca?
   5. Qué quiere la profesora que ustedes hagan?
   6. Desean tus padres que ecuentres un trabajo?
   7. Quire usted que $us padres visiten la universidad?
   8. Estudia usted todas la noches?
   9. Sabe usted los nombres de todos los estudiantes en
      esta clase? Comó se llama ella? él?
   10. Viene usted a la universidad todos los dias? ¿Qué días
       no viene? (sábado y domingo, tal vez ?
   11. A qué hora cena usted?

II. DIÁLOGO Pag. 98

5 min. 1. El/la TA lee el diálogo en voz alto mientras los
           alumnos escuchan

10 min. 2. El/la TA lee el diálogo en frases corts y pide
           que los alumnos repitan cada uns siguiendo el
           modelo de usted. NO OLVIDEN LA PARTE ITALICO
           A PRINCIPIOS DE LA OJA.

5 min. 3. Pág. 99: Preguntas A

5 min. 4. <u>Dictado</u> . Los alumnos cierran los libros y
           ustedes dictan la parte en itlico a principios
           de la pág. 98 Dicten en frases cortas y repitan
           1 vez más para cada frase se escuche dos veces.

5 min. PARA COREGIR pueden hacer una de 2 cosas: 1) los
        alumnos pueden cambiarse entre si los papeles
        (que nadie se quede con el suyo) y corregir con la
        ayuda del libro. 2) Ustedes pueden recogerlos y
        corregirlos si prefieren. De cualquier manera, el
        DICTADO cuenta como un QUIZ.

5 min. 5. Pág. 99 (LIBROS CERRADOS) Ejercicio B, Preguntas
           personales. SI HAY TIEMPO hagan la parte de
           pronuciacion a fines de la pág. 99.

                              muchísimas gracias,
                              Beth

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LUNES 10/29/84   LECCION 9

15 min.   I.   Revisar los exámenes con los alumnos.

15 min. II.   CONVERSACIÓN libre usando los cuadros. Si los
               alumnos responden, usen las preguntas siguientes
               para comenzar.
               1. ¿Qué pasa en el cuadro?
               2. ¿Dónde está la gente? el muchacho? la casa?
               3. ¿Qué deporte practican en el cuadro?

 ES MEJOR QUE ELLOS DISCUTAN SIN TENER QUE HACERLES PREGUNTAS.

15 MIN. III.   ENSAYO:
               Que los alumnos escriban en ensayo de por lo menos
               50 palabras usando los temas de los cuadernos.
               Que escojan uno, nada mas, y QUE NO USEN LOS
               LIBROS.   El ensayo cuenta de QUIZ.

        IV.   Si hay tiempo puedes comenzar, ensenarles la conju-
               gación de los verbos en la pág. 109

CARLOS: Cuando terminas con los cuadros, pásaselos a Federico.
         Los necesita a las once.

MARÍA: Cuando terminas con los cuadros, pásaselos a Ruth.
         Los necesita a las diez.

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MIÉRCOLES 10/31/84.   LECCIÓN 9

I. Repaso: (LIBROS CERRADOS) Conjugación de los verbos
   siguientes que aprendieron en la conferencia de Mr. Kite.

5 min.   dudar   poner   traer   gastar
            negar   salir   ver   practicar
            dar   oir   esquiar   participar

II.   LIBROS CERRADOS:(10 min.)
      1. Ejercicios A y B, pág. 101
      2. Ejercicio A, pág. 103

III. LIBROS ABIERTOS (15 min.)
      1. pág. 101 : Ejercicio C
      2. pág. 104 : Ejercicios B, C, y D.

IV. ¿Cómo se dice? (10 min.)
      1. Todo de la pág. 108 .
      2. Las preguntas en la pág. 109 .

V.   Pág. 110-11 : (10 min.)

     Lean lo que está escrito al lado de los fotos y hagan
     las preguntas correspondientes. SI NO TERMINAN, QUE
     TERMINEN ESA PARTE EN CASA LOS ALUMNOS.

     VAN A TENER UN QUIZ SOBRE ESTO EL VIERNES .

VIERNES 11/2/84   LECCION 10

  I. LIBROS CERRADOS (10 min.)

     - pág. 113 : Ejercicios A y E

 II. LIBROS ABIERTOS

5 min. 1. Pág. 113: ejercicio C

5 min. 2. Pág. 114: ejercicio B

5 min. 3. Pág. 115: ejercicios C y D

5 min. 4. Pag. 116: ejercicios C y D

5 min. 5. Pág. 117: ejercicio A

5 min. 6. Pag. 118: ejercicio B

III. EXAMENCITO PROMETIDO

    Escriban las siguientes preguntas en la pizarra.
    Que los alumnos escojan tres , y que respondan
    en frases completas .

    1. ?Cuál es el deporte más popular del mundo hispánico?
    2. ?Cuál deporte de origen norteamericano es popular
        en países hispánicos?
    3. ?Por qué es tan popular el footing?
    4. ?Dónde puede uno esquiar en Hispanoamérica?

LECCION 13

miércoles, 28 de noviembre de 1984

I. VERBOS NUEVOS (LIBROS CERRADOS)

Ya que los alumnos estan para terminar el curso Span. 101,
deben saber las tres conjugaciones bien. Así que pueden
conjugar los verbos siguientes de esta lección. Solo hay
que decirles si el verbo cambia de raiz (stem change):

        cocinar   querer(ie)
        invitar   parecer
        probar(ue)   aburrirse (de)
        acordarse(ue) (de)

II. DIÁLOGO   (LIBROS ABIERTOS)

   - Pág. 148: El/la TA lee el párafo que introduce el
     diálogo y el texto del diálogo.

   - Pág. 149: "Preguntas" A y B **

** Que todos en la clase tengan oportunidad de responder,
   no solo los que siempre saben las respuestas.

III. DISCUSIÓN (LIBROS CERRADOS)

   - Que los alumnos reconstruyan lo que paso en el
     diálogo. Algunas preguntas que pueden usar para
     comemzar la discusión:

     1. ¿Cuál es el tema de este diálogo?
     2. ¿En qué ciudad están los dos jovenes?

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LECCION 13

Viernes, 30 de noviembre de 1984

I. ANUNCIOS

- los alumnos deben comenzar el proceso de apuntarse
  a una media hora para el examen oral. Las listas
  vienen adjuntas a esta oja.

- Por favor; devuélvanme las listas el viernes de la
  semana próxima o antes. Las necesito para preparar
  las listas finales para los días de examen.

II. REGRESAR LOS EXAMENES a los alumnos y discutir con ellos
    las respuestas.

III. PRÁCTICA

   A. LIBROS ABIERTOS

      - Pág. 151: Ejercicios A y B

      - Pág. 152: Ejercicio D

   B. EN LA PIZARRA

      - Pág. 152: Ejercicio E. (Yo siempre les pregunto

                   a los alumnos si la frase está bien o
                   mal. Si está mal ellos me dicen lo
                   que está mal y como corregirlo y yo lo
                   borro y hago correción.)

   C. LIBROS CERRADOS

      - Pág. 152: Ejercicio F **

        ** POR FAVOR: No salten este ejercicio que es muy
           importante como práctica para el examen final.

                                    Mil gracias,
                                    Beth

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LECCION 13

Lunes, 3 de diciembre de 1984

I. ANUNCIOS

   A. Exit Questionnaire

      - To be done by Beth at the <u>beginning</u> of each class.

   B. Listas para el examen oral

      - por favor no olviden de las listas para el examen
        oral final. NO SE SI SE DIERON CUENTA de que el
        primer día del exam hay un cambio de hora (11:00
        y 11:30 en vez de 10:00 y 10:30).

II. PRÁCTICA

   A. Libros abiertos:

      - pág. 153:   <u>el subjuntivo con creer y pensar</u>

                    ejercicios A y B (usen "no creo, No
                    crees...?" etc con el ejejrcicio B.

      - pág. 155:   Objetos directos

         * ejercicios A, B, C, y G.

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ETHNOGRAPHER'S REPORT

INTRODUCTION

This research project was designed to include a broad spectrum of evaluation methods. The ethnographic method of participant observation, in addition to statistical methods based on objective tests, was intended to provide a more complete undersatanding of the effects of computer-assisted instruction. Anthropological studies have shown that firsthand involvement in the educational process can reveal information that may not be revealed by even the most sophisticated educational or psychological tests. This information concerns factors like student attitudes, motivational levels and differences in instructors. The interdisciplinary approach taken by this project yields more comprehensive results by combining this observational data with that gained from statistical manipulations.

The time limitations of this project required a short term "micro-ethnography." This type of study is more goal-directed than the open-ended observations made by anthropologists with the luxury of more than a year in the field. The ethnographer looked specifically for factors in "classroom culture" which might supplement or conflict with laboratory method affecting students' learning of Spanish.

ETHNOGRAPHIC PROCEDURES

The ethnographer gathered data from several sources. She observed lecture and recitation sections, reviewed laboratory settings, and informally interviewed students and instructors. The most important of these sources was the classroom observation. Because of her schedule, the ethnographer relied less upon informal interviews during the

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second semester than the first semester of the study. The value of exit questionnaires as an important source of student data necessarily increased.

The ethnographer, dividing her time between the different lab methodologies, attended four to five recitation sections per week. Her own class schedule prevented her from attending all of the recitation sections, but both semesters she was able to attend at least one section of each TA. During the pilot study she was able to observe both sections of one TA and during the Fall, both sections of two TAs. She attempted to observe on a random basis at least one class per week for each TA.

Despite minor interference with attendance, the student status of the ethnographer proved to be an asset. Her lack of fluency in the Spanish language also proved advantageous. Although the students were aware of her presence, they did not seem to be affected by it. They accepted her as one with status similar to their own. Thus, she fit into the classrooms unobtrusively almost like just another student--an ideal situation for a participant observer.

ETNOGRAPHIC OBSERVATIONS AND RESULTS

All recitation sections were held in one wing on the second and third floors of the Chemistry building. The location was somewhat remote, in that it required ascending several stairways and walking down a hallway away from the main corridors. Students seemed to have no trouble getting there after the initial semester adjustment period, but often many students arrived late, especially during the Fall. This was probably more a function of the TA than of remoteness of location, since students were rarely late in sections where the TA discouraged tardiness.

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At full attendance the rooms were crowded. Except near holidays, nearly all seats in all sections were occupied. In one section in the Fall there were more students than seats, and three to four students regulary sat on the floor. This situation occurred as a result of the TA's misunderstanding of drop procedures. The desks were the old wooden variety in various states of disrepair. They were crowded into the rooms so that students were forced into each other's social space. It is interesting to speculate that this may actually augment learning in some situations, since students began to interact on a more personal level more quickly. Every day in every observed section the ethnographer overheard personal discussions that often evolved into discussions about Spanish.

The desks were organized in a rough rectangle of rows and columns surrounded on three sides by a perimeter of desks backed up against the wall. Most of the time the TA's remained in the space behind a twle which occupied the fourth side--the front of the room--where the blackboard was also located. The TAs emerged from behind the table more often during the pilot study than during the Fall.

Students were mostly of Freshman age. There was a good representation of "nontraditional" students, although less so in the second semester than the first. These "nontraditional" students were older, mostly in their 20's and 30's, although there was at least one student each semester who was even older. Nontraditional students were often married, sometimes had children, and were usually working as well as attending school. They appeared more confident, motivated, and outspoken. In the pilot study, sections with higher proportions of nontraditional students tended to be more entertaining and more informative for the ethnographer. However, in the Fall there were

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fewer older students, and they were fairly evenly distributed among recitation sections. It is likely that the proportion of freshman students is higher than nontraditional students in the Fall, since new freshman usually start in the Fall, while nontraditional students whenever they can. This characteristic of classroom demography probably had another effects on the research project.

Students seemed mostly to be middle to upper middle-class non-Hispanic Caucasian. There were a few non-American students. They were the only ones who obviuosly had a language other than English as their first language. Minorities were under-represented. These observations are supported by data gathered on the entrance questionnaire and discussed elsewhere in this report.

TA's were all graduate students, but not necessarily in the Department of Spanish and Portuguese. In the Fall, all TA's were Hispanic and native speakers. This contrasted purposely with the pilot project, when all TA's were non-native speakers and all happened to be non-Hispanic Caucasian. Reasons for this change are discussed elsewhere in this report. Effects on the classroom culture, however, are significant enough to be discussed separately.

As graduate students TA's occupied a hierarchical and functional position somewhere between professors and students. Exactly where they fit in seemed to be decided by the individual TAs and decisions appeared to be influenced at least in part by cultural patterning. US TA's acted almost as the students' peers. They emphasized their own student workload and often shared personal information which revealed many similarities in interests and activities. The Latin American TA's, one from Puerto Rico, two from Argentina, and one from Chile, held positions perhaps closer to those of instructors. Although they

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were friendly, they did not spend nearly as much time before, during, or after class, fraternizing. They also mantained a level of classroom interaction that more closely resembled that of instructor. The ethnographer never observed the Hispanic TA's reminding their students that they were the teachers, as she did occassionally in the US TAs' sections. It should also be mentioned here that the average age of the Hispanic TAs was slightly higher than that of the US TAs (29 as opposed to 25) and that lesson plans were used in the Fall, but not in the Spring. Both of these are factors which could contribute to this observed difference.

Furthermore, the Hispanic TAs' difficulties with English may also have precluded the sa͟n͟ ͟d of relationship the US TAs had with their students.

The ethnographer suspected during the pilot study that the rapport shared by the TAs and their students might have contributed to students' perceptions of the benefits of recitation. The accidental testing of this hypothesis in the Fall shows that this is not the case. In the Fall the degree of rapport was considerably lower. However, as discussed below, students in both semesters perceived their recitations to be the most beneficial aspect of the course.

Although instructors' styles were different, enough patterns were observed to identify all classes as introductory Spanish classes. These patterns were more uniform during the pilot project, possibly because the TAs were all operating within their own culture, and they all shared USA cultural backgrounds. They all began the time period with a certain amount of chatting about things other than school. Some instructors did more asking, while others did more telling. As the semester progressed, this chatting was increasingly carried out in

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Spanish. The function of this activity seemed to be first, to establish rapport between the instructor and the students; and second, to provide a time for experiencing conversational Spanish.

Surprisingly, this informal chatting, even in Spanish, did not occur as regularly with the native Spanish-speaking TAs in the fall semester. Ruth did include this short but important activity at the beginning of each class period. Maria and Carlos, respectively, included less of this chatting. Federico included none during the observed classes. One is tempted to speculate that Ruth's Puerto Rican cultural origins, which may be more similar to those of mainland USA than other Latinamerican polities, contributed to this difference. It is likely that Maria's and Ruth's previous teaching experience also contributed to this observed difference.

Formal classroom work began after the initial period ceased. The TAs usually signalled this switch by opening their books or by asking lecture-related questions. Federico usually started by taking roll, and all TAs eventually took roll during each class. The work period differed considerabley between semesters, but consisted generally of grammar and vocabulary drills, dictations, written or oral question-answering, or special activities like skits ad games which the students especially enjoyed. Some time was spent on "departmental requirements", which were frequently related to the project. During the pilot project there were a few complaints about this loss of class time; instructors tended to disclaim responsibility in attempts to remain neutral. These departamental activities did not appear to fit in with the

students' ideas about the "culture" of the classroom, although many attempts were made to assure the students that the project was

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intended, if anything, to augment their Spanish language acquisition. Nevertheless, one or two comments appeared in the exit questionnaire denouncing percieved roles as "laboratory rats."

Lessons learned from the pilot project taught the staff to make research-related activities fit into the existing curriculum and evaluation activities. As a result, time spent on solely "departamental activities" decreased a great deal during the Fall semester. No comments concerning this subject appeared on the exit questionnaire from the Fall semester, although many students did mention another procedure they did not like, and three comments associated the pjroect director with this procedure

In an effort to gain increased control over experimental variables strict attendance rules were enforced at lecture, recitation, and labs. Twenty-four out of 141 respondents to the exit questionnaire complained about mandatory attendance, making this the third most common topic of comment about the course in general. Not only were the comments numerous, they were strongly worded. The following are representative comments: "Drop the attendance requirement altogether. At the university level, students should be responsible for making intelligent choices as to their time management. If one wishes to do well in a course, that individual will attend it regulary." "We are in college and we should be treated like adults. If we don't attend that's our problem — we just won't do as well as the rest. I attend every class because I want to but I do know people who can learn from the book just as well. They should not be punished for not attending, as long as they know the material." "I am an adult. Required attendance in lecture and recitation and lab should not exist. Anyone who can do well without attending deserves

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it ! "

Classwork was also more structured during the Fall semester than during the pilot project. Descriptions of the changes and reasons for them are discussed elsewhere, but observations concerning them should be mentioned here. Lesson plans were visible in many, but not all sections. The degree to which they were used varied widely. Occasionally it was difficult to discern that different sections were indeed using the same lesson plan on the same day. This phenomenon is probably due to differences in TA usage of lesson plans, as well as to differences in levels of achievement by different sections of students.

Since TA attitudes toward the project were observed in the pilot project as possibly affecting the outcome, Fall TA's were more carefully instructed to avoid comments concerning the project. The ethnographer did not observe such comments, and feels that this variable has likely been eliminated.

Under the more structured system introduced in the Fall, TA's were also carefully reminded that the exposure to Spanish should be as similar as possible for all students. To that end, they were all forbidden to explain lecture material in recitation. The exit questionnaire revealed both a malcontentment with this rule and the knowledge that it was not always followed, to the students' perceived benefit. In answer to question 23, "What were the most effective aspects of this class?" (see appendix #) one student responded, "(My TA) really put an effort into our learning. She was not supposed to do certain things that we learned in lecture, but if we asked, she would help!!!"

Fall TAs were also reminded that no English was to be spoken in

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the classssroom. Since they all had some difficulty with English, the latter admonishment was less necessary than in the pilot project, when all TAs except Liza frequently lapsed into English. Even in the Fall, if students became very frustrated all TAs would attempt explanations in English. According to comments in the Exit Questionnaire, students saw native speakers as both a pro and a con. They seemed to appreciate that mostly Spanish was spoken in the classroom, and that they were exposed to native Spanish, but expressed frustration with the lack of competence in English. One student responded to two questions in the following way:

> Question 23: "What were the most effective aspects of this class?"
>
> Answer: "Spanish-speaking TA forcing more spanish speaking in recitation."
>
> Question 24: "What were the least effective aspects of this class?"
>
> Answer: "Sometimes the TA could not express def. and meanings to us in English."

Classes usually finished at the end of the 50 minute period. They wound down as this time approached, but occassionally the instructor, still talking at the end of the period, was forced to end abruptly. In either case, many students began to gather their belongings together about two minutes before the class ended. This is typical of other university classes as well.

Most students usually left the room quickly, but some always stayed behind to speak informally with the instructor. They frequently discussed administrative details at this time. These post-class chats, instigated by the students, contrasted to the pre-class chats

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which were begun by the instructors. They occasionally lasted more than ten minutes and had to be concluded in the hallway to allow the next class to begin on time. Probably because they were less comfortable talking in English, Fall TAs tended to participate less in this activity than did the pilot TAs in the Spring.

Aside from patterns that crossed recitational boundaries, each recitation section seemed to have its own personality. Class character developed early in the semester, and certainly depended upon the mixture of independent personalities. In the pilot study, despite the TAs' intent to give equal instruction, they could not mask their preferences for the more exciting, more motivated groups. Motivation was demonstrated by class participation

--voluntary questions and answers, as well as general comments about Spanish language or culture.

Pilot study section 012, for example was highly motivated, active and participatory. The instructor, Becky, noted that some students were "overly talkative" and she felt this might inhibit the shyer ones from participating. Nevertheless, Becky's enthusiasm for this particular class was evident and all the students in it were likely to benefit from her exitement.

Becky's other section, 022, was less motivated at the beginning. Although it was never as motivated as the first section, its character changed somewhat over the course of the semester. Becky's obviously gregarious style may have influenced this change in. Despite her concerns, she mantained a high energy level with both groups.

The other pilot TA's also experienced differences in group personalities. The ethnographer saw Lisa's section 024, for example, as very unresponsive; it was generally a boring group. On several

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occasions Lisa volunteered that her other section (014), which the
ethnographer was unable to observe, was more fun and more reponsive.
Lisa was the only TA in the pilot study who consistently spoken only
in Spanish, and she, like the others, gesticulated to help to make the
Spanish understandable. She seemed genuinely concerned that the
students understand her, but they made little attempt to work with
her. However, the exit questionnaires revealed a fondness for Lisa
similar to the feeling expressed by students in other sections for
their TA's.

Michael's and Dawn's groups were between the extremes of
motivation described above. Both also described differences in
motivational levels of their two sections. Michael's dry wit and
Dawn's patient attention were appreciated by their students, as
reflected in comments made in informal interviews. One student went
out of his way to tell the ethnographer that Dawn's teaching was the
main reason he was doing so well with Spanish.

This phenomenon of class character emerged as a factor which was
likely to influence learning. It is unlikely to be explainable by any
single factor. Variables such as time period or class location may
have had some influence, but with the possible exception of 8:00 a. m.
sections, these were probably too consistent to make much of a
difference. The ethographer had observed the effects of self
selection for 8:00 a.m. classes in other courses, and it should not be
ignored. However, no significant differences were observed for the
one 8:00 section each semester of this project.

It seemed possible that TA's personality might be a major factor
contributing to class personality, but the fact that the same TA could
have such different classes made that ulikely. Another possible cause

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for the differences was the assigned lab method. Both computer groups did display high motivation. However, Dawn's tele-lesson group and Lisa's control group were the highly motivated ones, while Dawn's control and Lisa's tele-lesson were the lesser motivated ones. Perhaps assignation to a computer group resulted in high motivation, while for the other groups some other factor was a greater influence.

During the Fall semester, classes seemed much more similar. The ethnographer was able to observe both of Federico's and both of Ruth's sections. Ruth's section 023, assigned to audio labs, seemed somewhat more lively and quicker than the others. Three German students with other cultural experiences and other language knowledge to share almost certainly contributed positively to the class. However, differences between any TA's two sections were minor compared to differences between any section of two TA's. Probably because of tighter classroom controls (in factors such as attendance, lesson plans, etc.) differences seen in the Fall sections were more likely to be due to the TA's teaching ability than in the Spring. When the TA is free to respond to class personality with pedagogical changes, as he was in the pilot study, class personality probably becomes more pronounced. Otherwise, teaching ability is probably primary. In fact, TA and class personalities almost certainly develop in a positive feedback situation throughout the semester.

Ruth's and Maria's classes tended to be slightly more responsive, which is consistent with expectations, since both had previous teaching experience. Both articulated carefully, and probably as a result of that, their sections seemed to have the best pronunciation. Of all the TA's, Ruth and Federico most carefully enforced the Spanish-only requirement.

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Federico's words were rushed and run-together, which is apparently typical of Chilean Spanish. At times students appeared to have difficulty understanding him, but several commented that they appreciated a native speaker. Despite his obvious lack of teaching experience and his discomfort in the classroom, his students generally felt they learned a lot from him. The following comment reflects what the ethnographer observed, but what apparently few students minded: "If you had a wrong answer he'd just pass you by and call on someone else. It made me feel awful sometimes." It probably did not help his or her learning, either. The ethnographer observed him smoking and socializing with students outside the building between classes, and his friendly nature certainly had a positive influence on learning if his technique did not.

Carlos was also unexperienced as a teacher. Furthermore, he was not a Spanish, linguistics, or education student, but an anthropologist. Except for some negative comments at the beginning of the semester, Carlos' students were generally as positive as those of other TA's by the end.

Exit questionnaires from both semesters revealed an overwhelming feeling that the most effective aspect of the class was the recitation or the TA. Although most sections contained students who commented negatively, they were in the extreme minority, for example, 2/13, 0/10, 3/13, and 0/13 of respondents from four sections. Representative comments follow: "I enjoyed the recitation very much. --Carlos A+ !!! " " Federico is a wonderful teacher, and amiable. This stimula.. ealthy class atmosphere. Class was well organized, strictly Spanish, and enjoyable." "Maria ... is an excellent, driving teacher." "Ruth was an excellent TA. She prepared us for tests and

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made this class fun as well."

Students' attitudes about labs varied. There were more complaints about labs from students in the pilot project than those in the fall semester. The most complaints came from students assigned to tele-lesson labs in the pilot study and to audio tape labs in the Fall. In both semesters, virtually all computer lab students who responded to the questionnaire felt strongly positive about their labs. Interestingly, students assigned to computer labs in the Fall, who also had to attend the audio lab, felt more negative about the latter than those assigned only to the audio lab.

Respondents to the Spring exit questionnaire were very negative about the tele-lessons. Fall respondants tended to rate the audio lab differently depending on whether or not they had also experienced the computer lab. The students in the audio-only lab were more positive than negative about the audio lab (60% of the responses were positive; students who had both computer and audio labs were somewhat more negative - only 45% of them gave positive evaluations of the audio lab). The consistent response was that the computer lab was extremely beneficial, but students felt they needed more computer time. Such a positive attitude toward the computer lab must positively influence learning. If differences do not show up on evaluative techniques used by this project, the reason must almost certainly be that the students did not have enough time on the computer. A few students in audio-lab even expressed positive attitudes toward computer labs. "The computer were very useful for learning reading and writing. They also were good for learning vocabulary because they forced you to have the meaning of words; " "make the computers mandatory;" "working on the computer really

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helped me learn irregular verbs, spelling changes, and how to apply them;" "you need more computers. They help a lot more than the audio;" "the class could be improved by allowing more time on the computers;" were some of the comments.

Labs settings were sterile, but not uncomfortable. Many students had problems with lab scheduling, especially in the Fall, when attendance controls required limiting lab hours to those that could be proctored by staff members.

Several factors emerged about the course in general that should be mentioned. By far the most urgent and most common remark both semesters was made about the course pace. Thirty-four of the Fall exit questionnaire respondents said either that the course was too fast or that it should go slower.

The next most common comment concerned the lectures. Students felt the lectures were given too hastily or they were just a repetition of the book. Both of these characteristics were felt to make them boring. Lecturing was conducted in English and with the use of the overhead projector. The lecture classes were large: 82 to 85 students. Some students from both semesters wanted the classes to be smaller. Attendance at lectures during the pilot study was poor, but improved in the Fall probably because of revised attendance policies.

There were some positive remarks about the cultural lectures and the other cultural material. There were a few students who said such things as, "Dr. Kite was a very good lecturer and easily explained complicated material." A fascinating result concerning Dr. Kite appeared on the Fall exit questionnaire, and deserves further investigations. By a very significant margin, computer students rated him more positively than did the audio students. This result is

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discussed elsewhere.

Many students complained about the lack of conversational skills received from the course. Twenty-four of 141 people expressed dissatisfaction about this aspect of the class. Since the hypotheses of the research project involved all areas of language learning, this dissatisfaction is especially important. The computer labs, by providing extra drill-and-practice, were expected to make more time available in recitation for conversation. It is likely that adherence to lesson plans obviated time for conversation. The TA's were told to skip drills in the lesson plans if students did not need them. Since there were always at least a few people who needed more drilling, this effect was not observed. The TA's may also have found the simple and halting conversation boring, but this was not apparent. For the expected result to occur, it is likely that a less structured classroom is necessary. This must be balanced against the benefits rendered by the structure in terms of class personalities.

An appreciable number of students saw the benefits of the frequency of exposure to Spanish (daily) and/or complimented the coordination of the course. One student remarked, "The class was well organized and the labs, lectures and recitations fit together." Another added the text to the list said it was a "good comprehensive program." One person felt he "got more out of this than two years of high school Spanish."

Despite the inevitable negativity on the part of some students, most appeared to have learned some Spanish, and many enjoyed it. The response to the computer lab was far more positive than predicted. It seems reasonable that this positive attitude toward language labs improves performance if students are given as much time as they want

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in the labs. This hypothesis bears further testing. As usual, this research ends up with even more questions to answer, but the path it has opened appears to offer significant improvement in the foreign language training of American students.

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MASTERY TEST

PART I: TEXT FOR SPANISH LISTENING COMPREHENSION

This is the Spanish Listening test. It is a test of your ability to understand spoken Spanish. There are three parts to the test. At the beginning of each part, directions will be given in English. Listen to them carefully and study the sample questions when you are asked to do so. The rest of the test is in Spanish. The choices from which you are to select your answer are printed on your exam, but the QUESTIONS will be SPOKEN to you. Throughout the test you will hear each question ONLY ONCE. In all parts of the test you will know that the next question or selection is about to begin when you hear "numero". Your score will be based on the number of questions you answer correctly. It will be to your advantage to answer every question even though you may not be sure that your answer is correct. Now you are ready to begin. Please please turn to page 1 of your exam and listen to the directions for the 1st part.

In this first part, you will hear a series of statements. Each statement describes one of four pictures on your exam. You are to decide which one of the pictures is being described. Look at the sample pictures and listen to the description. DO NOT mark an answer on your exam.

NUMERO 0: __Aqui hay un muchacho.   beep

Of the four pictures, picture C best fits the description, so C is the correct answer. Remember, this is a sample so do not mark this answer on your answer sheet. Now look at the other pictures on your exam. The test is about to begin.

NUMERO 1:   Treinta y cuarenta son setenta.

NUMERO 2:   El gato esta en la mesa.

NUMERO 3:   Las muchachas saludan a una amiga.

NUMERO 4:   Son las seis y cuarto.

NUMERO 5:   Estoy con mi hermana. Ella es mas grande que yo.

FOR THE NEXT 10 QUESTIONS YOU WILL NEED ONLY THE ANSWER SHEET.

In this part you will be asked several questions dealing with everyday situations. For each question you are to select the best reply from among the four choices which you will hear. Listen carefully to the questions and to their possible answers. Each answer will be preceded by a letter in Spanish A, B, C, D. Choose the letter which corresponds to the answer which you have chosen and fill it in on your exam. Now listen to the sample question and to its four possible answers. This is just a sample . Do not mark this answer on your answer sheet.

NUMERO 0:   ?Que dia es hoy?   beep

A.   Ahora no.

B.   Es lunes.

C.   En cinco minutos.

D.   Seguramente manana.

Of the four choices which you heard, only B is a suitable reply, so this is the correct answer. Remember, this just a sample . Do not mark this answer on your answer sheet. Now listen to the questions in this part and to their possible answers. Begin with number 6.

NUMERO 6:   ?Son ustedes hermanos?

A.   No, en el centro.

B.   No, somos amigos, nada mas.

C.   No, tenemos muchos.

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D.   Si, un poco.

NUMERO 7:   ?A que hora tenemos que volver a casa?

           A.   A las cinco.

           B.   Vuelven manana.

           C.   Solo tengo una.

           D.   Tres y cinco son ocho.

NUMERO 8:   ?Donde esta Juanita ahora?

           A.   A estudiar.

           B.   No esta bien.

           C.   Amiga de Susana.

           D.   En la biblioteca.

NUMERO 9:   ?De que color es la blusa de tu mama?

           A.   Es azul.

           B.   Es su blusa.

           C.   Es de mi mama.

           D.   Mi mama me la da.

NUMERO 10:   ?Por que no viene tu hermano a jugar al tenis esta

           tarde?

           A.   No, no viene.

           B.   No, es temprano.

           C.   No tiene raqueta.

           D.   No lo tiene mi hermano.

Next you will hear a series of short conversations between two people. One person will ask a question or make a statement and the other will respond. You will _then_ be asked a question about what has been said. You are to select the best answer from among the four choices you will hear. Listen to the _sample_ conversation and to its four possible answers.

BEST COPY AVAILABLE

NUMERO 0:   __?Cuanto cuestan estos tornillos?

__Valen veinte pesos.

?Donde se encuentran las personas que hablan?

A. En una tienda donde venden turnos.

B. En una tienda donde venden comestibles.

C. En un supermercado.

D. En una ferreteria.

Of the four answers which you heard, only D is a suitable reply so D is the correct answer. Remember, this is just a sample . Do not mark this answer on your answer sheet...... Now the test is about to resume. Listen to the conversations and answer the questions about them. Begin with number 11.

NUMERO 11:   __?Prefiere usted musica clasica o popular?

__A mi no me gusta la musica clasica pero me

encantan los ritmos bailables. Me quedo con

este.

?Que compra el joven?

A. Un baile.

B. Un libro.

C. Un disco.

D. Un rico.

NUMERO 12:   __Senorita, quiero cambiar esta camisa. Es un

regalo y me queda grande.

__Esta bien. ?Que numero usa usted, senor?

?En que tienda se escucha esta conversacion?

A. En la de ropa.

B. En la de libros.

C. En el supermercado.

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D. En la ferreteria.

NUMERO 13:   __?Cuanto tiempo hace que usted esta enferma?

__Creo que hace casi una semana.

?Cuanto tiempo hace que esta enferma la mujer?

A. Creo que si.

B. Esta enferma.

C. Hace mal tiempo.

D. Hace ocho dias.

NUMERO 14:   __!OOph! Que calor.

__Pues, ?que esperas? En julio no hace frio.

?De que hablan los senores?

A. De la lluvia.

B. De que hace calor.

C. De que hace frio.

D. De que esperan a Don Julio..

NUMERO 15:   __Ay, papa. Soy la unica que no tiene coche.

Quiero comprar uno esta semana.

__Mira, Juana. Eres demasiado joven para tener

coche. Espera hasta el ano proximo.

?Quien es Juana?

A. La hija.

B. El papa.

C. Una Tia.

D. La hermana.

THIS IS THE END OF THE LISTENING TEST. PLEASE TURN TO PAGE TWO
OF YOUR EXAM AND DO THE READING COMPREHENSION PORTION OF THE TEST.
REMEMBER TO USE THE ANSWER SHEET FOR YOUR ANSWERS AND TO BEGIN WITH
#16. DO NOT MAKE ANY MARKS ON THE EXAM ITSELF.

POST TEST

SPANISH 101

UNIVERSITY OF COLORADO

BOULDER, COLORADO

DO NOT TURN THIS PAGE

UNTIL YOU ARE TOLD TO DO SO

LISTENING   (10 MIN.)

SAMPLE ---   A.   SKETCH OF MAN.   C.   SKETCH OF BOY

             B.   SKETCH OF WOMAN.   D.   SKETCH OF GIRL

1.   A.   ARITHMETIC   B.   ARTHMETIC
          PROBLEM: PROBLEM:
          SUM OF 60   SUM OF 70

     C.   ARITHMETIC   D.   ARITHMETIC
          FROBLEM: PROBLEM:
          SUM OF 27   SUM OF 7

2.   FOUR SKETCHES OF A CAT AND A TABLE.
     A.   CAT ON TABLE   C.   CAT ON FLOOR NEXT TO TABLE
     B.   CAT UNDER TABLE   D.   CAT ON FLOOR IN FRONT OF TABLE

3.   FOUR SKETCHES OF CHILDREN
     A.   TWO BOYS WAVING TO GIRL   C.   BOY WAVING TO GIRL
     B.   TWO GIRLS WAVING TO BOY   D.   TWO GIRLS WAVING TO GIRL

4.   FOUR SKETCHES OF CLOCK WITH HANDS
     A.   TIME: 6:04   C.   TIME: 6:15
     B.   TIME: 4:05   D.   TIME: 6:40

5.   FOUR SKETCHES OF ADULTS AND CHILDREN
     A.   ELEMENTARY AGE BOY WITH MOTHER
     B.   SAME BOY AND SMALL GIRL
     C.   SAME BOY WITH FATHER
     D.   SAME BOY WITH SMALLER BOY

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SAMPLE:

NUMERO 0: A. Ahora no.

B. Es sábado.

C. En cinco minutos.

D. Seguramente mañana.

NUMERO 6: A. No, en el centro.

B. No, somos amigos, nada más.

C. No, tenemos muchos.

D. Sí, un poco.

NUMERO 7: A. A las cinco.

B. Vuelven mañana.

C. Sólo tengo una.

D. Tres y cinco son ocho.

NUMERO 8: A. A estudiar.

B. No está bien.

C. Amiga de Susana.

D. En la biblioteca.

NUMERO 9: A. Es de azul claro.

B. Me da una camisa.

C. Es de mi mamá.

D. Mi mamá me la da.

NUMERO 10: A. No, no viene.

B. No, es temprano.

C. No tiene raqueta.

D. No lo tiene mi hermano.

SAMPLE:

NUMERO 0: A. En una tienda donde venden turnos.

          B. En una tienda donde venden comestibles.

          C. En un supermercado.

          D. En una ferretería.

NUMERO 11: A. Un baile.

          B. Un libro.

          C. Un disco.

          D. Un rico.

NUMERO 12: A. En la de ropa.

          B. En la de libros.

          C. En la de dulces.

          D. En la de juguetes.

NUMERO 13: A. Creo que sí.

          B. Está enferma.

          C. Hace mal tiempo.

          D. Hace unos ocho días.

NUMERO 14: A. De la lluvia.

          B. De que hace calor.

          C. De que hace frio.

          D. De que esperan a Julio.

NUMERO 15: A. El hijo.

          B. El papá.

          C. Un tío.

          D. Un próximo.

END OF LISTENING TEST

DO NOT WRITE ANY ANSWERS ON THIS EXAM. WRITE ALL ANSWERS ON THE
ANSWER SHEET PROVIDED.

Part II. READING COMPREHENSION (15pts.)

Dos muchachos deciden pasar la noche al aire libre. Juan acaba de
dormirse cuando siente una mano en el brazo. Es Jaime que trata de
decirle algo__!Sh! Juan, ?oyes ese ruido? Creo que alguien viene.
?Quién puede ser? Tengo mucho miedo.__!Qué tonto eres, Jaime! Es mi
perro que viene.

16. Durante la noche Jaime y Juan
      a. duermen en casa.
      b. oyen algo.
      c. deciden levantarse.
      d. tienen miedo.

17. Jaime cree que alguien
      a. duerme cerca de ellos.
      b. dice__!Sh! !Sh!
      c. tiene miedo.
      d. no está muy lejos.

Después de abrir la puerta de su casa, Pedro se quita los zapatos, y
sin hacer ruido entra y va a su cuarto, mira el reloj y dice:__!Las
tres de la mañana!· Si mi padre se entera (finds out), él me hace
quedarme en mi cuarto una semana.

18. Pedro entra en su casa
      a. sin zapatos
      b. después de las tres.
      c. y hace mucho ruido.
      d. para llamar a su padre.

19. Parece que Pedro llega
      a. tarde.
      b. a tiempo.
      c. temprano.
      d. para ver a su padre.

20. Pedro no quiere hacer ruido para
      a. no estar solo.
      b. no entrar sin zapatos.
      c. no despertar a su padre.
      d. no dormir tarde.

María es una cantante que tiene una voz horrible. Sin embargo, cuando
sus amigos la invitan a la casa, insiste en cantar. En una ocasión
que canta se le ocurre a la mujer de la casa decirle que su hijo está
enfermo aunque no es la verdad. Le dice a María con todo el tacto
posible:__Amiga, nos encanta tu canción, pero mi hijo de diez años
está enfermo en su cuarto y es necesario que no cantes para no
molestarlo. María irresistible responde:__Ya lo se. La criada me lo
dijo (told me), pero tu hijo es sordo (deaf)__. Y sigue cantando.

21. La mujer de la casa no quiere que María cante porque
    a. su hijo es sordo.
    b. María tiene una voz muy mala.
    c. su hijo está enfermo.
    d. no tiene tacto.

22. María canta en
    a. casa de unos amigos.
    b. casa de la criada.
    c. el teatro.
    d. el bar.

23. La mujer de la casa le dice a María que no cante y que
    a. se vaya.
    b. no quiere a María.
    c. su voz es horrible.
    d. su hijo esta enfermo.

24. María...
    a. tiene un hijo sordo.
    b. presenta la criada a la mujer de la casa.
    c. deja sorda a la mujer de la casa.
    d. no dice la verdad.

25. Una persona sorda no puede
    a. ver.
    b. oir.
    c. hablar.
    d. sentir.

Francisco Rodríguez camina por la Calle Independencia cuando de repente se encuentra con un amigo. Se dan la mano y se abrazan (hug one another). __Manuel, !Tú por aqui!__grita Francisco. __!Qué contento estoy de verte! No puedo creer que estás en la América Central. ?Qué haces?__

__Pues, estoy de viaje de negocios como siempre. Hace unos minutos que llego. Por eso no te llamo por teléfono. Ahora tengo una hora libre. Te invito a tomar algo en ese café y así podemos conversar largamente.__

26. Francisco Rodríguez
    a. no se alegra de ver a Manuel.
    b. espera a Manuel en la Calle Independencia.
    c. invita a Manuel al café.
    d. es invitado por Manuel al café.

27. Manuel quiere hablar con Francisco
    a. por teléfono.
    b. por unos minutos.
    c. por largo tiempo.
    d. en la América Central.

28. Manuel viene a la América Central
    a. para ver a Francisco.
    b. en viaje de turismo.
    c. porque tiene negocios en el país.
    d. por avión.

29. Manuel no llama a Francisco por teléfono porque
    a. no tiene ganas.
    b. hace poco tiempo que llega.
    c. está de viaje.
    d. quiere invitarlo a un café.

30. Cuando se ven, Francisco y Manuel
    a. se dan la mano.
    b. no se hablan.
    c. se acompañan.
    d. no se miran.

END OF READING COMPREHENSION TEST - GO ON TO NEXT PAGE

PART III.   WRITING TEST

For each of the three pictures below, write two Spanish sentences describing the situation taking place.   At least one of the sentences for each picture should contain a reflexive verb.

REMEMBER TO WRITE YOUR ANSWERS ON THE ANSWER SHEET, NOT ON THIS PAGE.   BEGIN WITH # 31.

31. ....   SKETCH OF WOMAN
34. ....   IN BATHROBE
                                                    SITTING ON EDGE OF
                                                    BED, GETTING UP.

37...   SAME WOMAN GETTING
40...   READY TO SIT DOWN TO
                                                    HAVE BREAKFAST.

43...   SAME WOMAN DRINKING
46...   FROM GLASS WHILE
                                                    SITTING AT TABLE
                                                    WITH CEREAL BOWL,
                                                    CUP, ETC.

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WRITE 2 SENTENCES DESCRIBING EACH SITUATION BELOW.

49...................................   AT TOP OF SKETCH, THE
52...................................   WORD, dormir,IN CAPS.
                                              MAN ASLEEP IN CHAIR
                                              WITH OPEN BOOK.

55...................................   AT TOP OF SKETCH, THE
58...................................   WORD, cerrar, IN CAPS.
                                              WOMAN CLOSING WINDOW.

61...................................   AT TOP OF SKETCH, THE
64...................................   WORD, nadar,IN CAPS.
                                              BOY DOING CRAWL STROKE
                                              IN SWIMMING POOL.

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