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ABSTRACT

This paper assesses the impact of using computer-assisted instruction (CAI) in three American University undergraduate classes, a General Education survey course on Latin America (taught in English), and two Spanish language courses. The courses utilized both commercial software programs and software programs authored by faculty using Macintosh Hypercard programming software. Data was assessed for the three classes over ten semesters from standard University numerical and narrative evaluation forms, mid-term evaluations asking for suggestions to improve the remainder of the course, an anonymous, open-ended questionnaire, and grades received for computer exercises and over-all course grades. CAI had a significant impact in the courses assessed. Selection of software is a critical issue; faculty found that many commercial programs were unsuitable for college-level courses, and that the use of authoring software involved a substantial amount of time and effort. Student resistance to CAI was related to exposure to computers in grade and high schools, and to whether students previously used Macintosh computers. The assessment found that CAI can take over many of the lower-order teaching functions, such as grammar drills and transfer of factual knowledge, and permit the instructor to devote more time and attention to higher-order functions such as discussion, critical thinking, analysis, and role-playing exercises. Contains student numerical and narrative evaluation forms; sample mid-term evaluation forms; selected narrative comments; and 12 references. (SWC)

Assessing the Impact of Computer-Assisted Instruction (CAI) in Undergraduate Latin American Studies

by Jack Child

"Assessing the Impact of Computer-Assisted Instruction (CAI) in Undergraduate Latin American Studies Courses"[1]

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I. Introduction

This paper employs several approaches to assess the impact of using computer-assisted instruction (CAI) in several American University undergraduate courses. The various CAI materials are first described (Part II) as part of an evolutionary process from conventional teaching of several courses to increasingly heavy use of CAI, especially in a survey General Education course for first and second year college students, "Latin America: History, Art, Literature".

The methodology of the assessment is described in Part III, along with the various sets of data developed. The data is then analyzed and conclusions reached in Part IV. Attachments include sample student evaluation of teaching forms and selected narrative comments made by students.

In examining the literature on CAI, one is struck by the generally accepted premise that CAI has a strong positive impact on teaching, especially at the K-12 and lower university levels[2]. Understandably, this

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[1] This project has been supported, in part, by a grant from the Consortium of College and University Media Centers.

[2] For an assessment, see Computers in Education, edited by Robert Muffoletto and Nancy Nelson Knupfer. Cresskill, NJ: Hampton Press, 1993. Reinhardt, Andy, et al, "New Ways to Learn", Byte, March 1995, pp. 50-72. Jones, Lorella and Dennis J. Kane, "Student Evaluation of Computer-based Instruction in a Large University Mechanics Course", American Journal of

premise is enthusiastically echoed by those involved in developing and selling the hardware and software labeled as "educational".

There is also much debate about what "good teaching" is, and how to measure it. In recent years the instruments used to evaluate teaching at the college level have come under increasing scrutiny[3]. Because of these basic questions on what constitutes good teaching and how to evaluate it, this paper employs a variety of approaches to get at the impact that CAI had on several courses taught by the author and a number of colleagues. The emphasis is on evaluation approaches which allow students themselves to express their reactions, either as numerical or narrative responses to teaching questionnaires.

II. The CAI materials used

The computer-assisted instruction materials used in the courses considered in this paper include commercially-available software as well as programs authored by various faculty members. Because of its

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Physics, September 1994, pp. 832-836. Courtney, Tim, et al, "The Impact of Computer Technology on the Teaching of English", English Journal, December 1993, pp. 68-70. Levin, Henry M. and Gail Meister, "Is CAI Cost-Effective?", Phi Delta Kappan, June 1986, pp. 745-749. Gelernter, David, "Unplugged: the Myth of Computers in the Classroom", New Republic, September 1994, pp. 14-15. Robert L. Jacobson, "As Instructional Technology Proliferates, Skeptics Seek Hard Evidence of its Value", Chronicle of Higher Education, 5 May 1993, pp. A27-29. Amy E. Schwartz, "Visions of the On-Line University - in 3D", The Washington Post, 16 June 1995, p. A23. Dunkel, Patricia A., "Computer-Assisted Instruction and Computer-Assisted Language Learning (CALL)", The Modern Language Journal, 1987, vol 71, pp. 250-260.

[3] Abrami, Philip C., et al, "Validity of Student Ratings of Instruction: What we Know and what we do not", Journal of Educational Psychology, 1990, vol. 82, no. 2, pp. 219-231. Marsh, Herbert W., "Multidimensional Students' Evaluations of Teaching Effectiveness", Journal of Educational Psychology, 1991, vol. 83, no. 2, pp. 285-296. Langbein, Laura I, "The Validity of Student Evaluations of Teaching". PS: Political Science and Politics, September 1994, pp. 553.

suitability for educational uses, its "user-friendliness", and its easy incorporation of graphics, sound and animation, the preferred computer platform was the Macintosh.

Examples of the commercial software include "Hidden Agenda" and "Hyperglot Spanish Grammar Review". "Hidden Agenda" is a role-playing computer game in which the student is the president of a post-revolutionary fictitious Central American country, and must make decisions and take actions in response to situations and demands from a wide range of other actors (ministers, labor leaders, ambassadors, IMF representatives, former guerrillas, former military officers, etc). The outcome of the game is determined by the player's ability to forge coalitions and avoid making too many enemies (an element of chance is also present). Possible outcomes of the game include being re-elected, losing an election, being ousted by a coup, or assassination. The outcome is printed out and is turned in by the student for a grade.

The second item of commercial software used, "Hyperglot Spanish Grammar Review" presents the student with a series of short grammatical problems in Spanish. The student must respond by selecting or typing in an answer, which is either confirmed as correct or corrected if in error. The range of grammatical problems includes all the major categories considered by intermediate and conversation and composition courses at the college level. At the end of each exercise the computer prints out a summary sheet (with the student's name on it) showing the topics covered and the percentage of correct answers. This sheet is then turned in to the instructor for credit.

The principal software item used by faculty members to author their own computer programs was Macintosh Hypercard. The choice of Hypercard was made after considering a number of software authoring programs, and was based mainly on Hypercard's wide distribution (almost every Macintosh has some version of it), its ease of use by both instructor and student, and its flexibility in integrating text, graphics, animation and sound. These features overcame the negative aspects of Hypercard, to include unsatisfactory color, and difficulties in incorporating photographs and video.

Hypercard's basic metaphor is the 5x8 index "card", which is presented as a single screen display. These "cards" are arranged in "stacks" which correspond to chapters or lessons in a printed text. These notecards, which appear one at a time on the computer screen, can be Hypercard's pre-made ones, or ones created by the instructors, who can easily design their own layout, and then fill the card with text, graphics, animation, sound, or just about anything else the computer can accept. But the real power of Hypercard comes with the ability to put these cards together in "stacks", to link these cards in a number of ways, and to quickly find information on individual cards. This allows one to escape the linear restrictions of most written and visual materials, and allows the student to explore the material in a variety of ways s/he selects. For example, a lesson on the 1492 encounter of Europe and Indigenous America might begin with a short introductory paragraph placed on one "card". If the student is not interested in digging deeper into this topic, s/he can skip to the next subject (the Conquest). But the "Encounter of two worlds" card is

linked to a number of other cards which the student can read or skip: Indigenous civilizations in America; the Renaissance as the European cultural framework for the Age of Discovery; maps; individuals (Christopher Columbus, Queen Isabella; Nezahualcoyotl); music from the period, etc. At any point the instructor can ask Socratic questions on the significance of the material, or pose test questions in a variety of formats. In summary, the value of Hypercard is its flexibility, creativity, and non-linear linkages.

Hypercard is "authoring" software, which, in effect, is a programming system for people who hate, fear, or dislike programming. Being designed for the Macintosh, it operates with icons rather than lines of programming language text, and the end result is that the instructor is actually writing programs without realizing it. The process involves the typical Macintosh procedures of selecting and moving a variety of arrows, boxes and other symbols around the screen.

The course selected to receive the principal amount of CAI was a General Education survey course taught in English ("Latin America: History, Art, Literature", referred to as "LAHAL"). The selection was based on the fact that it was a new course in 1990, when the CAI effort was initiated, that it was offered each semester, and had a relatively large enrollment (40 students per offering). Most of the students taking the course are second-semester freshmen and sophomores who are using it to complete the two-course sequence in General Education Curricular Area 3 (International and Intercultural). Very few of them have had any prior

study of Latin America, and most have either not defined their majors, or have majors other than Latin American Studies.

Because the students are non-majors who are taking the course to satisfy a General Education requirement, their basic knowledge of Latin America is very limited. Further, most of them have had little prior study of international or intercultural issues other than the required foundation course. Ethnocentricity is more pronounced than among students who are majoring in international studies or foreign languages. Further, because the General Education Program is a requirement, some students are less than totally motivated or interested in the subject.

A common complaint from these students is that faculty who teach this type of Gen Ed survey course assume too much background knowledge. Area studies courses, such as this one, are seen by many students as overwhelming them with large volumes of strange names and places. They tend to be swamped with facts they feel they must know, and have difficulty sorting out the important ideas from the forest of details. They frequently have trouble making connections with other ideas and materials from other courses, and have problems visualizing concepts and people who are far away from them in time, space, and cultural background.

One important learning issue which this type of CAI addresses is how computers can help learning-disabled students. Because this software has a heavy visual component, and can be repeated as often as the student wants with no pressure, learning-disabled students (especially those with

dyslexia) have found the software to be very helpful as they study and review. International students, and especially ones for whom English is a second language, report similar reactions.

Students seem intrigued when they discover that the material they normally can only find in a book or class lectures is also available to them in a computer program they can quickly master. The possibility of going through the program in a non-linear fashion, jumping ahead or repeating sections at their will, gives the students a feeling of empowerment and control over their learning progress. Being able to type in their own answers (in the electronic notebook for short-answer questions) makes the program interactive and lively. Further, Hypercard has a variety of inherently motivational features, such as visual effects, hidden pop-up windows, linkages to other material, etc.

Perhaps the strongest motivational feature is a content one: the questions in the Hypercard program are similar to the ones the students will encounter in daily quizzes, the mid term, and the final exam. There is a "data bank" of some 300 alternate exam questions built up over the various offerings of the course, and most of these questions have been included in the Hypercard program. By going through the complete program, a student can feel that s/he is ready to face the similar questions in the exams. If a problem is encountered, the computer will provide a pop-up help screen, often containing explanatory information and a page reference to the textbook.

In addition to the LAHAL course, CAI was also developed for several other courses. These included "Intro to Latin American Literature" and "Intro to Spanish Translation". The literature course is taught in Spanish, and a Spanish version of the Hypercard stacks was developed for it. A parallel text was also prepared in both Spanish and English; the text was first developed as a locally-photocopied desktop published text, but after several semesters was published commercially. Faculty purchasers of the text at other institutions can obtain a free copy of the computer program for use in their own courses. The translation course also resulted in a commercially published text, with Hypercard software containing a large collection of idiomatic expressions which are presented (in both Spanish and English) in writing, spoken, and with illustrative graphics. The use of sound and the large number of graphics made it necessary to employ a CD-ROM format.

A 'stand alone" Hypercard program on the geography of Latin America was also developed as a supplement to be used in Latin American area studies courses (in English or Spanish)[4]. When used in Spanish language classes the program is run in Spanish, but any student having trouble with the language has the option of temporarily opening up a window (which stays open as long as the mouse or keyboard control is held down) which provides an English translation.

[4]This "Introduction to the Geography of Latin America" program was initially developed, in part, with support from the State Department's Foreign Service Institute. It is now available commercially.

III. Assessing the impact of CAI

As indicated previously, the assessment of CAI described in this paper involved mainly one General Education survey course taught in English ("Latin America: History, Art, Literature"). Two other courses assessed were from Spanish language offerings of the university's Department of Language and Foreign Studies: "Intro to Latin American Literature", and "Intro to Spanish Translation". The data sources used (over the past ten semesters) involved:

- Standard American University numerical evaluation of teaching forms (See Attachment 1a). Of particular interest were two key items:
#9: "The course materials (textbook, assigned readings, manuals, etc.) contributed significantly to my understanding". Students were instructed to consider the CAI materials as forming part of these "course materials" in making their evaluation.
#14: "Overall this course is .. Superior/ Very Good/ Good/ Satisfactory/ Fair/ Poor."

- Standard University narrative evaluation of teaching forms (see Attachment 1b). These open-ended survey instruments ask the student to write short entries with regards to "The Course" and "The Instructor" in response to perceived "Strong Points", "Weak Points", and "Suggested Improvements". The numerical and narrative evaluations are administered in the final week of the course, are anonymous, and are not seen by the instructor until the semester is over and the grades are turned in. The impact of these evaluations, and any changes stemming from them, is felt

not by the students taking the course that semester, but rather by future students.

- Mid-term evaluations prepared by instructors interested in seeing how the course is unfolding, and requesting suggestions for changes which could be applied to modify the remainder of the course. A representative form is at Appendix 2. As can be seen, instructors typically inquire about the value of specific course activities.

- An open ended anonymous questionnaire (usually administered about one-third of the way through a course) asking students to identify the single thing that most contributes to learning in the course, and the single thing that most hinders learning.

- Grades received in the computer-assisted portions of the course, as well as over-all course grades. These were used in an attempt to correlate the two (see "Data Set D", below).

Data Set A: Numerical evaluation of teaching data in a single course, same instructor, without and with CAI.

This data set uses questions 9 ("Course materials") and 14 ("Overall this course is...") from the standard University numerical evaluation of teaching form, and grades in the mid-term exam, in an attempt to assess the impact of adding computer-assisted instruction materials. The data is from the same course, taught by the same instructor, over ten semesters from Spring 1990 to Spring 1995. The course syllabus and other course materials did not change significantly over these semesters, although

there was the usual modification of reading materials and assignments. The size of the class ranged from 28 to 40 (the maximum allowed). The first offering (Spring 1990) did not use CAI, and is the control group for seeing the impact of the CAI added in the Fall 1990 semester.

As can be seen in Table 1 below, the impact of adding the CAI materials in Fall 1990 was dramatic, with a gain of almost 8 percentage points in the mid-term exam grade, 22 points in the percentage of those "strongly agreeing" that the course materials were useful, and 14 points in those students rating the course as "superior". In the last two semesters (Fall 94 and Spring 95) the instructor attempted to bring down the rather high grades in the mid-term exam by making the exam more difficult and by being less generous in awarding partial credit on short-answer and essay questions.

Table 1: Data from course 37.210,"Latin America: History, Art, Literature", Spring 1990 through Spring 1995 (Instructor "A")

Semester	Mid-term exam average	% "strongly agreeing" course materials are useful	% rating course "superior"
Spring 90 (no computer)	80.26	61	58
Fall 90 (with computer)	88.18	83	72
Spring 91 (with computer)	88.35	90	77
Fall 91 (with computer)	90.18	88	84
Spring 92 (with computer)	90.17	71	74
Fall 92 (with computer)	90.36	72	81
Fall 93 (with computer)	87.81	97	82
Spring 94 (with computer)	90.13	85	76
Fall 94 (with computer)	85.38*	91	85
Spring 95 (with computer)	84.17*	91	65

*In these semesters the instructor attempted to bring the mid-term average down by making certain questions more difficult and by being less generous with partial credit on short-answer and essay exam questions.

Although the subjective nature of teaching and learning (and the doubts cast on the reliability of numerical evaluations of teaching) make it risky to place too much reliance on this data, it does seem clear that a significant change took place in this course in the Fall 1990 semester, which happens to be when the CAI was added.

Data Set B: Numerical evaluation of teaching data in a single course, two different instructors, with and without emphasis on CAI and media.

This data set was generated when a substitute instructor took over the course described above for one semester. The substitute used the same text and general syllabus, but did not emphasize CAI, making it an option rather than a requirement. In addition, the substitute did not make as heavy use of other media (35mm slides and video) as the regular instructor. Because it was not possible to isolate the impact of de-emphasizing CAI, Table 2 which follows is titled "Comparison of CAI and media usage" to indicate that factors other than CAI may account for the different ratings from one instructor to the other. The differences in ratings are also possibly due to the inevitable differences in style, personality and teaching approaches between individuals.

Table 2: Comparison of CAI and media usage in offerings of 37.210, "Latin America: History, Art, Literature" taught by two different instructors

Instructor	Use of CAI & media	% "strongly agreeing" course materials are useful	% rating course "superior"
"A" (9 semesters)	Heavy	82	77
"B" (1 semester)	Light	48	29

Data Set C: Student ratings of different class activities

As indicated previously, instructors frequently ask for feed-back on individual course activities at mid-term in order to make changes which will affect the remainder of the course. Student reactions are considered significant because they are aware that their responses can have an effect on the rest of the course they will be taking. As part of the mid-term evaluation for the survey course "Latin America: History, Art, Literature" students are asked to rate, on a 1-5 scale, the value of selected class activities. Over a number of semesters the highest rated activity has consistently been the computer review disks described above. Another computer activity (the Latin American geography exercise) also ranks high.

Table 3: Comparison of Mid-term evaluation of various activities in course 37.210, "Latin America: History, Art, Literature"; various semesters, taught by instructor "A"

Class activities. (Please rate the value of the various class activities on a 1-5 scale, with 1=useless; 3=OK; 5=very valuable).

RANK ORDERED	Average
The computer review disks:	4.66
Instructor's illustrative slide lectures:	4.46
The cultural objects:	4.23
Geography exercise in computer lab:	4.09
This mid-term exam:	4.04
Group discussions in class:	4.02
The role-playing simulations:	3.83
Student talk (when giving yours):	3.78
The Museum visit paper:	3.76
The unannounced quizzes:	3.70
Student talk when you are listening:	3.64
Written part of your painter report:	3.37

Data Set D: Computer disk utilization data

The same mid-term evaluation forms occasionally also asked students how often they used the computer review disks. At the beginning of the course the instructor stresses that ideally they should use the computer disks before each class to reinforce their reading, and to prepare them for possible unannounced quizzes in that class. For the mid-term and the final they are required to turn in their disks containing their short answers to a number of questions posed on the disk (this counts for a modest percentage of their course grade). The data below is typical, and suggest that about a quarter of the students use the review disks in preparing for each class, about half at least every couple of classes, and about one-fifth use the disks for the mid-term exam only (as required). A small percentage (2.7% in the Spring 95 semester) said they did not use the disks at all. Possible reasons for this non-usage are suggested in the narrative comments further on.

Table 4: Computer disk (review) utilization data.
Course 37.210, "Latin America: History, Art, Literature"
Instructor "A", Spring 95

Taken from Mid-term evaluation forms, question 6:
6. The computer disks for review. How often do you use them:
___Each class ___Every couple of classes
___Only for the Midterm ___Never

Each class:	27.0%
Every couple:	48.6%
Midterm only:	21.6%
Never:	2.7%

Data Set E: Scattergram relating computer grade and course grade

For the last several semesters in the "Latin American History, Art and Literature" survey course ten points of the over-all course grade are allocated to computer exercises as follows: 3 for the geography exercise, 3 for the mid-term exam disk, and 4 for the final exam disk. The geography exercise involves running the computer program and using information from it to answer a series of multiple choice questions and write a brief essay on the impact of Latin American geography. The mid-term and final exam disk exercises involve preparing short answers (on the floppies) which are turned in at the exam and serve as useful preparation for the exams. These disks are read by the instructor and awarded a grade based on the number of questions answered and their quality.

The scattergram below shows the correlation between the grade (10% of the course grade) received on the computer exercise, and the final course letter grade. Each dot represents one student in the Fall 1994 semester, and a perfect correlation would place all the dots on a 45 degree line, so that students failing the course would have a zero on the computer exercise, and those getting A's would also be getting the maximum of 10 points on the computer exercise. The visual presentation shows a fairly strong correlation.

(See Scattergram, Table 5 on next page)

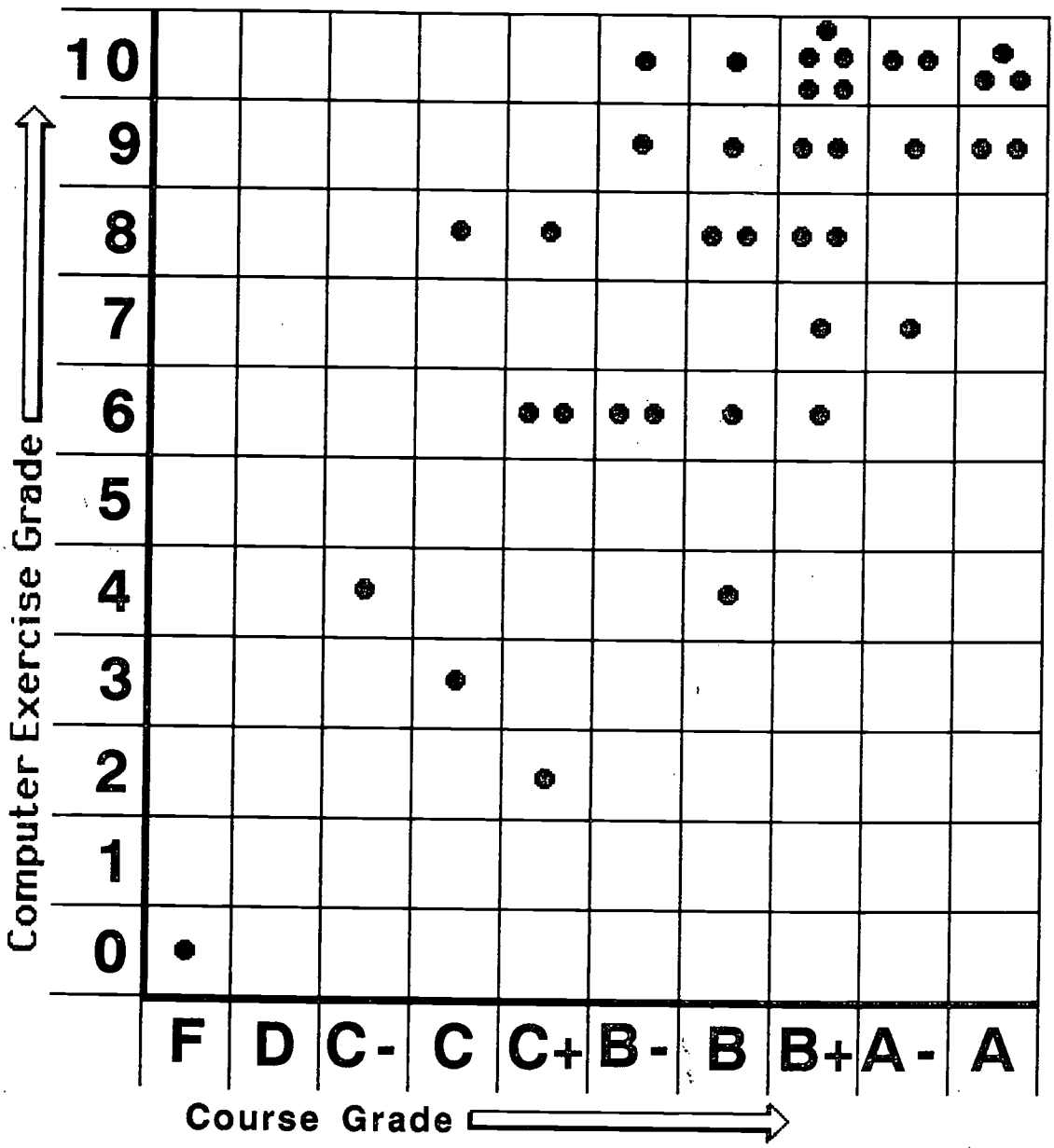

Table 5: Scattergram relating course grade and computer exercise grade for course "LAHAL", Fall 1994

Data Set F: Student "1/3 way through" response to what helps/hinders

In several offerings of the course, "Latin America: History, Art, Literature" students were asked at the one-third point of the course to respond to the two following questions, in writing and anonymously:

1. Please list here the **one single thing** that is doing the most to **help you learn** in this course:
2. Please list here the **one single problem or difficulty** that is doing the most to **keep you from learning** in this course:

For a representative semester (Spring 1992) the top four answers in each category are shown below in Table 6:

Table 6: Student responses to things which most helped/hindered learning
Course 37.210, "Latin America: History, Art, Literature", Spring 1992

a. Question 1 - The things that were most helpful in the course:
   1. The computer (11 students)
   2. The slides (10 students)
   3. The instructor (5 students)
   4. The text prepared by the instructor (3 students)

b. Question 2 - The things that caused most difficulty in the course:
   1. Too much material too fast (13 students)
   2. The computer (6 students)
   3. The outside (commercial) text (5 students)
   4. Class size is too large (5 students)

As can be seen, the predominant answer to question 1 was "the computer". Curiously, 6 students also listed "the computer" as keeping them from learning. This was discussed in class, and what emerged was the feeling among some students that they were hesitant to use a computer because they had never used one before for anything other than

word processing. Others cited heavy demands on their time which made it difficult to use the computer, although they acknowledged its usefulness.

Data Set G: Impact of media use in translation course (5 instructors)

The impact of CAI and use of media (35mm slides, video) was also assessed in other courses in the Spanish section of the Department of Language and Foreign Studies. Table 7 shows the correlation between the use of media and the percentage of students rating the "Intro to Spanish Translation" course and instructor as "superior". For the six year period under consideration the basic text and syllabus were the same, although the five different instructors had the option of choosing how much media (35mm slides, video) and CAI (mainly a grammar review program) they would include. The five instructors were judged to make "heavy", "medium" or "light" use of CAI and media on the basis of their syllabi and discussions with students and the instructors themselves.

Table 7: Comparison of five instructors teaching "Intro to Spanish Translation" course, 1989-1994

Instructor	Use of CAI and media	% rating course as "superior"	% rating instructor as "superior"
C	Heavy	56	68
D	Heavy	53	53
E	Medium	63	69
F	Light	00	00
G	Light	00	00

The data in Table 7 show a strong positive correlation between use of media and the percentage of students rating the course as "superior". In this table another key question on the numerical evaluation form is

included: #21 "Overall, the instructor is ... Superior/ Very Good/ Good/ Satisfactory/ Fair/ Poor". Data for this question show a strong correlation between the rating for the course and the rating for the instructor, a pattern which generally appears in student evaluations.

Data Set H: Narrative comments (see Attachment)

Narrative comments which address the impact of CAI (and also media) are generated in two different ways. One is the optional comments made in response to general questions on the strong/weak points in the course on the final course student evaluation of teaching. The second way is in response to specific questions dealing with the impact of CAI included in the mid-term evaluation of teaching form prepared by the instructor. A sampling of representative positive and negative comments is included as Attachment 3.

In general the positive comments far outnumbered the negative ones, which was consistent with the data given above suggesting that CAI is well-received by most students.

The positive comments focused on the value of the review disks as a study tool, and stressed the ease and even enjoyment of using an interactive computer program heavily loaded with graphics and animation. The relatively few negative comments focused on scheduling problems and difficulties getting to the computer lab during regular hours. MS-DOS users (especially those who owned computers at home) objected to the fact that the programs were available only on the Macintosh platform.

Finally, a very small number of students said they hated (or feared) computers and would not use them.

IV. Conclusions

The data presented above and the sample narrative comments in the Appendix suggest that computer-assisted instruction had a significant impact in the courses considered here. The greatest impact was in the broad (but not very deep) survey course on Latin America taught in English. The principal impact in Spanish language courses involved grammar drill exercises. CAI is presumably of less significance in more advanced courses which would rely more on discussion and analysis.

The software selected is clearly a critical issue. Faculty members involved examined a number of commercially sold software programs and concluded that many of them were unsuitable for college-level courses. The use of "authoring" software (such as Hypercard) by instructors to prepare materials specific to their courses is one solution, but it does involve a substantial investment of time and effort. It has the unexpected by-product of giving the instructor a greater stake in his/her course, and in providing a creative outlet which students appreciate.

There is some resistance to CAI on the part of a small number of students. Based on observations made over a seven year period, this number is steadily diminishing as more and more grade and high schools expose students to computers early on in their academic careers. Also significant is the resistance on the part of MS-DOS oriented students to programs developed for Macintosh computers.

From the instructor's viewpoint, the kind of CAI examined in this paper can have an important impact on how basic language and area studies survey courses are taught. CAI can take over many of the lower-order teaching functions, such as grammar drills and transfer of factual knowledge, and permit the instructor to devote more time and attention to higher-order functions such as discussion, critical thinking, analysis, and role-playing exercises.

V. Attachments

1a Student end-of-course evaluation form (numerical)

1b Student end-of-course evaluation form (narrative)

2. Sample mid-term evaluation forms.

3. Selected narrative comments

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THE AMERICAN UNIVERSITY
WASHINGTON, DC

STUDENT EVALUATION OF COURSE AND TEACHING EFFECTIVENESS

To the Student: Evaluation of courses and instructors by students is the standard policy of The American University. Information provided by students is part of the documentation used in faculty personnel and annual merit-pay review. Additionally, the information, particularly the narrative comments, may also be used for faculty development--the strengthening of both teaching and courses. The statistical information from tabulation of the forms will be available--after final grades for the course have been submitted--to the instructor, the teaching unit administrator, the department rank and tenure committee and/or merit pay committee, other university officials and committees, and the University community. The narrative comments will be made available to the instructor only after the final grades for the course have been submitted; and individual instructors may, at their sole discretion, share these comments with their colleagues and administrators.

INSTRUCTIONS: This answer sheet will be read by a computer so be VERY CAREFUL marking the form.
USE A NUMBER 2 PENCIL ONLY.
MAKE ERASURES COMPLETE.
DO NOT MAKE ANY EXTRA MARKS.

Students Complete Area Below Only. **ANSWER COLUMN**

1. Class Standing: (select only *one* answer) — 1.
(1) Fresh. (2) Soph. (3) Jr. (4) Sr. (5) Masters (6) Doctoral (7) Undergrad. nondegree (8) Grad. nondegree (9) Washington Semester (10) Visiting Student

2. Major area or intended major area: (select only *one* answer) — 2.
(1) CAS/Arts & Humanities (2) CAS/Natural Sciences (3) CAS/Math & Comp.Sci. (4) CAS/Educ. or Comm. (5) CAS/Social Sciences (6) Kogod (7) SIS (8) SPA

3. Estimated cumulative GPA. First semester students at The American University should leave this answer blank. — 3.
(1) 2.0 or less (2) 2.1-2.5 (3) 2.6-3.0 (4) 3.1-3.5 (5) 3.6-4.0

4. Expected grade in this course: — 4.
(1) F (2) D (3) C (4) B (5) A (6) P (7) L (audit)

5. Reasons for taking this course: (select *all* that apply) — 5.
(1) Gen Ed Requirement or Univ. Requirement (2) Major, Minor or Honors Requirement (3) Major/Minor Recommended (4) Free Elective

6. Estimated number of hours per week that you spend on this course (including class time, lab time, etc.): — 6.
(1) 0-2 hours (2) 3-5 hours (3) 6-8 hours (4) 9-11 hours (5) 12 or more hours

7. Estimated number of classes you missed: — 7.
(1) none (2) one or two (3) three or four (4) five or six (5) more than six

8. The course was well-prepared and well-organized. — 8.
(1) Strongly Agree (2) Agree (3) Neither Agree Nor Disagree (4) Disagree (5) Strongly Disagree (6) No Opinion

9. The course materials (textbook, assigned readings, manuals, etc.) contributed significantly to my understanding of this course. — 9.
(1) Strongly Agree (2) Agree (3) Neither Agree Nor Disagree (4) Disagree (5) Strongly Disagree (6) No Opinion

10. The course assignments (papers, projects, homework, discussion sections, exams, etc.) contributed significantly to my understanding of this course. (1) Strongly Agree (2) Agree (3) Neither Agree Nor Disagree (4) Disagree (5) Strongly Disagree (6) No Opinion — 10.

11. The course provided an appropriate amount of interaction in the classroom. — 11.
(1) Strongly Agree (2) Agree (3) Neither Agree Nor Disagree (4) Disagree (5) Strongly Disagree (6) No Opinion

12. Overall, the course was demanding and required high standards of performance. — 12.
(1) Strongly Agree (2) Agree (3) Neither Agree Nor Disagree (4) Disagree (5) Strongly Disagree (6) No Opinion

13. Overall, I am satisfied with the amount I learned in this course. — 13.
(1) Strongly Agree (2) Agree (3) Neither Agree Nor Disagree (4) Disagree (5) Strongly Disagree (6) No Opinion

14. Overall, this course is: — 14.
(1) Superior (2) Very Good (3) Good (4) Satisfactory (5) Fair (6) Poor

15. Estimated number of times you consulted with the instructor outside of class: — 15.
(1) never (2) 1-3 times (3) 4-6 times (4) 7 or more times

16. Reasons for consulting the instructor: (check *all* that apply) — 16.
(1) Help with the course (2) Academic advice (3) Special Project (4) Complain about the course (5) Personal (6) Other

17. The instructor's presentations were clear. — 17.
(1) Strongly Agree (2) Agree (3) Neither Agree Nor Disagree (4) Disagree (5) Strongly Disagree (6) No Opinion

18. The instructor was stimulating. — 18.
(1) Strongly Agree (2) Agree (3) Neither Agree Nor Disagree (4) Disagree (5) Strongly Disagree (6) No Opinion

19. The instructor seemed knowledgeable about the subject matter. — 19.
(1) Strongly Agree (2) Agree (3) Neither Agree Nor Disagree (4) Disagree (5) Strongly Disagree (6) No Opinion

20. The instructor evaluated student work carefully, impartially, objectively, and in a timely manner. — 20.
(1) Strongly Agree (2) Agree (3) Neither Agree Nor Disagree (4) Disagree (5) Strongly Disagree (6) No Opinion

21. Overall, the instructor is : — 21.
(1) Superior (2) Very Good (3) Good (4) Satisfactory (5) Fair (6) Poor

THE AMERICAN UNIVERSITY
WASHINGTON, D.C.

STUDENT NARRATIVE COMMENT

INSTRUCTIONS:
Use this sheet to record personal comments about the "Strong Points," "Weak Points," and your "Suggested Improvements" for both the course and the instructor. These narrative comments are made available to the instructor only after the final grades for the course have been submitted. Individual instructors may, at their sole discretion, share these comments with colleagues and administrators.

COURSE NUMBER	INSTRUCTOR	SEMESTER

THE COURSE	THE INSTRUCTOR
STRONG POINTS	
WEAK POINTS	
SUGGESTED IMPROVEMENTS	

Evaluation of courses and instructors by students is the standard policy of The American University. Information provided by students is part of the documentation used in faculty personnel and annual merit-pay review. Additionally, the information, particularly the narrative comments, may also be used for faculty development—the strengthening of both teaching and courses. The statistical information from tabulation of the machined-scanned questionnaires will be available—after final grades for the course have been submitted—to the instructor, the teaching unit administrator, the department rank and tenure committee and / or merit pay committee, other university officials and committees, and the University community.

MID COURSE EVALUATION Fall 1994 Dr Child
Course: 37.210 Latin America: History, Art, Literature

I would like to ask you to help me shape the second half of this course by letting me know how you feel about the course so far. This is an anonymous exercise, unless you would like to discuss your ideas with me further (come by during office hours). You will also have a chance to do the regular University course evaluation at the end of the course. Please pull this sheet off the rest of your mid-term and turn it in separately.

I. Load: Has the workload been: ___too heavy ___about right ___too light

2. The Child text. (Rate on a 1-5 scale, with 1=useless; 3=OK; 5=very valuable): __
Any comments about the text?

3. Class activities. (Please rate the value of the various class activities on a 1-5 scale, with 1=useless; 3=OK; 5=very valuable).

The cultural objects:	Child's illustrative slide lectures:
The Museum visit paper:	The computer review disks:
The unannounced quizzes:	This mid-term exam:
Student talk (when you are listening):	Student talk (when giving yours):
The written part of your painter report:	The role-playing simulations:
The geography exercise in the computer lab:	Group discussions in class:

4. General education: to what extent is this course meeting the goals of general education, as you understand them? (Rate on a 1-5 scale, with 5 max):

Over-all:	Race, gender, class:
Ethics:	Writing:
Computers:	Interaction in class:

5. Expectations: Think back to what you expected when you signed up for this course. Are your expectations being met? Any surprises?

6. The computer disks for review. How often do you use them:
___Each class ___Every couple of classes ___Only for the Midterm ___Never
What is your general reaction to the program?

7. Other. Any other comments, suggestions or ideas? Please use the reverse side of this form to elaborate. Thanks for your assistance.

Attachment 3. Selected narrative comments

Representative anonymous student comments regarding the computer review disk for course 37.210, "Latin America: History, Art, Literature".

- I found the disk to be informative and interesting. It is a "non-threatening" form of review and study that I wish I had for more of my classes.
- I really appreciate the time and effort put into the program - I will try and return that effort by using the disk.
- Generally, I wouldn't take the time to study from a program like this, but I enjoy it so I'm positive that I'll use it... it was very simple, which is refreshing for a computer program!
- Funny - helpful; helps you ask questions; i.e., you think.
- What a learning tool!. There is no possible way that a person could fail when learning is made this easy and fun. Good idea!
- The visuals are especially useful - sometimes more helpful and memorable than in-class slides and text pictures.
- They are great, fun to do and they <u>really</u> help. This is the best study tool I've had since coming to AU (probably ever). I wish I had a disk for every class.
- I love it! Am very amazed! I wish to talk to you because I am very interested in learning Hypercard programming.
- The surprises help to make it exciting.
- I like it - it is very useful in learning & remembering things. The programs are also very funny - thank you for making them enjoyable.
- I have realized that I am more of a visual person and the computer really helps. For the next half I will probably just do the disk.

Some negative comments:

• (Weak point in course) It wasn't always easy to get lab computer time (but it was possible).

• (Suggested improvements): Don't make the questions on computer disk mandatory.

• I wish it weren't on Hypercard. Few people have Macintosh; fewer have Hypercard. (Labs) are a hassle.

• There are too many questions and it is very time consuming. The midterm review was good; however I wish it were IBM compatible, so that I could use it at home.

• A little too simplistic.

• (...) I spend enough time at the lab writing papers, I don't think it's fair to people who don't have computers. If I had one at home I would be more inclined to use it.

• I never seem to get to computer lab - I hate computers - if I did it, I'm sure it would be a great review, but I hate using the computers - waste a lot of time.

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