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EFFECTIVENESS OF COMPUTER-GRADED VS. INSTRUCTOR-GRADED HOMEWORK ASSIGNMENTS IN AN ELEMENTARY SPANISH COURSE: A COMPARATIVE STUDY AT TWO UNDERGRADUATE INSTITUTIONS

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ABSTRACT

Researchers at the United States Air Force Academy and Metropolitan State University of Denver collaborated on a study to determine the effectiveness of computer-graded vs. instructor-graded homework assignments in elementary Spanish courses at their respective institutions. Subjects completed one or the other type of online activities tied directly to a specific chapter of the textbook of the course and accessed via the online ancillary MySpanishLab. Following completion of the chapter activities and assessment, subjects were asked to complete a satisfaction survey indicating their reactions to and preferences for either computer-graded or instructor-graded activities. No significant differences were found between groups on assessment scores, though definite differences were noted indicating strong preferences for one type of activity over another.

INTRODUCTION

The demands on the time and energy of the foreign language instructor seem to be increasing while the resources to meet those demands are ever shrinking. Instructional technology may be seen as a coping mechanism; however, its increased use may generate uneasiness in caring educators who want the best for their students and who feel that personalized interaction improves learning outcomes. A general question arises when considering technology use in the foreign language (FL) classroom: does technology enhance instructional delivery or does it detract from the positive role of the instructor with regard to learning outcomes?

Part of the answer to this question seems to rely on the nature of the instructional delivery that the instructor wants to give. Traditional logic suggests that formative interaction between student and instructor will produce the best results, while summative interaction is useful only in the domain of assessment. Instructors may feel that they are doing a "good job" only if they provide this formative interaction to the students, and they rely on summative data to prove this point.

The language-learning technology implemented in the great majority of undergraduate language programs today challenges this outlook a bit. Technological platforms allow instructors to choose between formative and summative assignments--both performed within the platform--as they plan their instructional strategy. Typically, instructor-graded assignments are considered to be formative, while computer-graded assignments are viewed as more summative in nature.

There are advantages and disadvantages to both types of activity. Instructor-graded assignments offer the potential for more nuanced feedback to individual students, and they allow the instructor to closely monitor student progress. However, this type of assignment is much more time consuming for instructors to evaluate and diagnostically edit, and there is often a delay in giving the feedback to students. Additionally, students must return to the activities within the technological platform in order to make corrections and complete the assignments, thereby completing the formative feedback loop. With the computer-graded assignments, the feedback is immediate but constrained to the parameters built into the platform; an answer is either right or wrong, according to the pre-programmed response. In addition, the instructor must enter and exit multiple avenues of the technological platform in order to examine the individual

performance of any given student for a particular activity. Performance indicators are purely summative, and the instructor is not privy to the intellectual path the students took to arrive at each answer.

Thus, several questions emerge. If instructors want to deliver the best instruction, and if they favor formative techniques over purely summative ones, does it make sense to use computer-graded activities over instructor-graded activities? Does the type of student using the activities determine the efficacy of the formative versus summative approach? Does the use of impersonal technology detract from the positive presence of the instructor, or does it actually allow the instructor to create more time for in-class oral interaction, lesson planning, etc.?

This study investigates how two different institutions used an online package of tutorials and homework assignments called MySpanishLab to support their elementary Spanish programs and to attempt to answer the preceding questions. MySpanishLab, one of a suite of online MyLabs created by Pearson Education Inc. for use with their textbooks, offers both instructor-graded and computer-graded assignments. The overarching purpose of this study, then, was to determine whether the extra effort required by both instructors and students to complete the formative instructor-graded assignments produced any significant difference in student learning when compared to students who exclusively performed computer-graded assignments.

THE INSTITUTIONS

The two universities participating in the study represent vastly different organizations for teaching and learning. While technology is indeed a tool for diversification, the emphasis of the current study was on how students would react to a fixed point of technology, that being the instructor-graded versus computer-graded activities. In essence, the study came to be about how diverse student bodies reacted to one singular aspect of pedagogical technology. The diversity of the two institutions plays a key role in the outcomes of the experiment.

A comparison of the two institutions participating in this project is, in itself, a study of contrasts. The United States Air Force Academy (USAFA) is an undergraduate institution and one of five United States Service academies. The application and admission processes are extremely competitive and the

acceptance criteria are highly selective; acceptance rates are generally between 11-15%. The approximately 4400 cadets come from all over the U.S. and some foreign countries, including several exchange cadets. The vast majority of cadets fall in the age category of "traditional college students," being from 18-23 years of age with a few exceptions due to enrollment of prior-enlisted personnel and transfer students. Cadets are required to live on campus, they have additional military and athletic responsibilities and various further restrictions to college life apply, depending on academic standing and year of the students. Nearly all cadets graduate in the stipulated four years; the very few exceptions to this are due primarily to extremely extenuating circumstances. All cadets graduate with a Bachelor of Science degree.

While no FL major is possible at the institution, cadets may choose to minor in a FL; the minor is comprised of at least four courses at the 200-level or above with a specified grade point average. USAFA offers coursework and the minor in eight different languages: Arabic, Chinese, French, German, Japanese, Portuguese, Russian, and Spanish. USAFA has a comprehensive FL requirement that is applied according to academic major. Those cadets with a technological major (e.g., all types of Engineering, Physics, Aeronautical Engineering) must complete two semesters of a foreign language, while those with a major in non-technical areas (e.g., Management, Political Science, Foreign Area Studies) must complete a four-semester sequence. All incoming cadets take a FL placement exam and are placed in the appropriate FL class to begin their required sequence. Those with sufficient proficiency can validate the FL requirement and may opt out of further FL study.

In terms of instructor personnel, the Department of Foreign Languages, combined with the Department of International Programs (whose personnel teach at least one FL course per semester) at USAFA is one of the largest in the institution with more than 60 full-time instructors. Civilian and military personnel (at various academic and military ranks) each comprise approximately half of the instructional pool. The general faculty split at USAFA as a whole is approximately 70% military and 30% civilian instructors. While the curriculum at USAFA has a strong research-oriented component and instructors are expected to facilitate this production, USAFA is a self-designated "teaching institution."

While more traditional in terms of student body and academic offerings, Metropolitan State University of Denver (MSU Denver) is a unique institution in Colorado and the United States. The urban college shares the downtown-Denver Auraria Campus with two other institutions of higher education (the Community

College of Denver and the University of Colorado at Denver), and common-space agreements among the three allow MSU Denver students to take advantage of both preparatory and more advanced offerings at the respective neighbor schools. Three Master's Degree programs have recently been added to MSU Denver's wide slate of baccalaureate degree offerings.

MSU Denver's student body of over 24,000 is an exemplar of diversity. The institution admits students via a modified open-enrollment policy (completion of the General Equivalency Degree or traditional high school curriculum program and minimum age are the baseline requirements), and the student age range is from 16 to 70, with the median age of students being 23 years. MSU Denver students are typically high academic achievers who struggled in the traditional academic setting and came to MSU Denver in search of a more flexible, individualized approach to higher education. MSU Denver also enrolls many non-traditional students who are returning to school after military service, career, family, incarceration, or other life experiences outside of the academy. With limited residential assistance for students, MSU Denver is considered a commuter college, and almost all students work part- or full-time in addition to their studies. This notwithstanding, MSU Denver's reputation as a leader in educational quality is drawing many traditional students to the campus straight from high school. Regardless of their origin, 94% of the student body hails from the seven-county Denver metropolitan area, and MSU Denver is clearly a popular "school of choice" for Colorado students.

With the exception of select programs (Journalism and Hospitality), MSU Denver does not have a language requirement for the baccalaureate degree. Regardless of this fact, the Department of Modern Languages (MDL) at MSU Denver offers a traditional undergraduate program in language and literature to a robust enrollment. Majors are offered in Spanish, French and German, with minor programs and introductory courses in other languages. The MDL offers several first- and second-year courses online, and a Translation Certificate program at the upper-division level. In conjunction with the MSU Denver Teacher Education Program, the department offers a unique major designed to support students who wish to use FL as a primary or ancillary support in their licensure. Courses specifically designed for heritage speakers are also offered. In addition to on-campus study, MDL develops and offers multiple study abroad programs that are highly attended. Language learning technology is used in all first- and second-year courses, and the majority of upper-division courses also implement some type of language learning technology.

MSU Denver is currently seeking status as a Hispanic Serving Institution (HSI). The current enrollment of 19.5% Hispanic students in the year 2013 has earned MSU Denver national recognition as an "emerging HSI," and the institution is consistently ranked among the top 100 U.S. institutions for graduating Latino students (University Fact Sheet, n.d.). The goal of achieving HSI status plays a huge role in the development of curriculum and programs at the University, and this is particularly evident in the Spanish Program within MDL. Taking into consideration traditional majors, minors, double-majors and students with an emphasis in teaching, almost four percent (3.9%) of the total student body is currently enrolled in Spanish classes at MSU Denver.

The FL instructor base at MSU Denver is comprised of ten full-time tenured and/or tenure-track faculty members and between 20 and 30 active "Affiliates" (contingent faculty). Approximately 56% of full-time faculty teaches introductory and lower-intermediate classes on a regular basis. Of the Affiliate group, up to 80% regularly teach at other institutions. Though full-time faculty members are expected to fulfill the typical university requirements for research and service, MSU Denver is, like USAFA, considered a "teaching institution." Within MDL, however, research is most often performed in the area of the Scholarship of Teaching and Learning in order to maximize research talent while adhering to the pedagogical goals of the department and the teaching mission of the College.

THE STUDY

Rationale

While language-learning technology is *de rigueur* in the majority of FL programs today, when the current study began in 2010 the adoption of a program as extensive as MySpanishLab was exceptional. Both USAFA and MSU Denver considered the program to be cutting-edge, but both schools had many questions regarding the efficacy of a tool that had yet to be fully considered or proven by the educational market. Additionally, both schools were curious about how this type of technology would influence the evolution of traditional teaching methodologies in undergraduate FL classes.

Specifically, USAFA was interested in performing this study with the intention of justifying the decision to select the *¡Anda!* textbook series (Heining-Boynton & Cowell, 2009; Heining-Boynton, LeLoup, & Cowell, 2010) that was

accompanied by the MySpanishLab suite of online reinforcement activities. The impetus for MSU Denver joining the study was similar—the ¡Arriba! textbook series (Zayas-Bazán, Bacon, & Nibert, 2012) had already been adopted by MDL, but researchers wanted to justify the decision to incorporate MySpanishLab into a program previously devoid of language learning technology.

Both universities had turned to the literature to inform their adoption and implementation decisions prior to undertaking the current study, but the results of this research had provided theoretically contradictory answers as to the potential efficacy of language learning technology (Chapelle, 2010). Blake (2008) takes the view that technology can enhance second language acquisition depending on how it is used in the curriculum, which can include accessing the Internet as a source of authentic content, social interaction via computer-mediated communication in the target language, and learner feedback through the use of computer-assisted language learning (CALL) activities. While all these uses are potentially beneficial, the *¡Anda!* model of combining classroom instruction with tutorial CALL was particularly appealing due to its apparent efficient management of resources, specifically instructor and learner time and effort. MacDonald (2011) describes how commercially-produced, textbook publisher-supported virtual language laboratories seem to help compensate for institutional and student challenges such as providing more consistent quality among course sections and offering additional assistance to those students who need it. However, Ushida (2005) found that students may have anxiety about online language learning that could affect their performance. In addition, while students may find online activities helpful and even expedient, they often still want a certain degree of instructor interaction of some sort (Godev, 2009; Rovai & Jordan, 2004). Also, instructors in different sections of the same course can implement the online components idiosyncratically, which may also have an impact on student learning. The importance of the instructor's role should not be underestimated as it has been shown to be a major factor in student participation in and satisfaction with online activities (Belz, 2003; Ushida, 2005). Clearly an optimal scenario is one in which all instructors are completely comfortable with the technology involved in the study and display equal enthusiasm and pedagogical ability in their instruction. Such a scenario would be ideal but certainly difficult to effect. Bush (2008) amplifies the idea that while the benefits of computer-assisted language learning may seem to some to be obvious, the reality is that some students and even some instructors may resist making effective use of this resource.

For the current researchers, the aspect of MySpanishLab that was potentially the most troubling was that it gives the course director the option of assigning computer-graded activities, instructor-graded activities, or a mixture of the two. Assigning only computer-graded activities is appealing as it frees instructors from the tedious and time-consuming task of providing homework feedback to students, though possibly at the expense of short-changing students of the potentially detailed, nuanced and individualized error corrections that a caring instructor is able to provide. But research (Nagata,1996; Hubbard & Siskin, 2004; Goodwin-Jones, 2009) indicates that well-designed computer feedback can be more effective than manually-graded homework assignments in producing significant differences in learning, especially in helping students practice and learn grammatical constructions. Still, not all instructors and students may be convinced of this—hence the value of this study.

The ready availability of two treatments (computer-graded vs. instructor-graded) lent itself to designing a comparative research study where each treatment could be assigned to a separate group and the effects measured using a single assessment for the entire population. The most similar published study was the dissertation by Echávez-Solano (2003), which compared measures of beginning Spanish student motivation, aptitude and proficiency over a semester between an experimental group with a hybrid of web-based and classroom activities and a control group that only had classroom activities. Her findings were that no significant differences existed in either student performance or higher satisfaction among the experimental group students. Scida & Saury (2006) also looked at student performance in hybrid elementary Spanish courses with results consistent to those of Echávez-Solano. Similar comparative research done with other languages has shown similar findings (Allum, 2002; Chenoweth & Murday, 2003; Peters, Weinberg, & Sarma, 2008).

Replicating aspects of this earlier work seemed to be the most reliable means of assessing the value of the computer-graded versus instructor-graded activities in MySpanishLab at both USAFA and MSU Denver. For the current study, research questions and objectives were collaboratively developed, and the same study was conducted at both institutions.

Research questions

Both institutions shared the overall research question: Is there a significant difference in language proficiency/performance--as demonstrated on a

summative FL test--between students learning with computer-graded assignments versus those learning with instructor-graded assignments? Additional components of the study queried preference for assignment type by both students and instructors. Researchers hypothesized that there would be no significant difference in performance between the two groups. Additionally, at MSU Denver, it was hypothesized that subjects (Ss) and the pluri-employed instructor staff would prefer the computer-graded activities.

Research Design and Assessment Strategy

In the USAFA study the Ss were 229 students of elementary Spanish divided into 14 sections. Subjects in seven sections (Ss=115) were assigned to complete only the machine-graded assignments of MySpanishLab, while Ss (111) in the other seven completed only the instructor-graded assignments. The number of computer-graded activities was approximately three times the number of the instructor-graded activities, because the computer-graded activities are closed-ended (True/False, multiple choice, etc.), which take less time to complete than the open-ended, instructor-graded activities. Example questions for each type of activity are included in Appendix A. Based on archival data showing time on task from the MySpanishLab database, this division of the number of activities was deemed to equalize roughly the time it would take each group of Ss to complete their particular activities.

Where the same instructor taught more than one section, that instructor had at least one section completing each type of activity. The three-week period of the study corresponded to the lesson plans for Chapter 5 of the *¡Anda!* textbook used in the elementary Spanish course. Upon completion of chapter instruction and activities, all students took the same chapter exam. The results were analyzed by sections to determine any significant difference between the two groups in scores on the chapter test. During the lesson following the exam, students were asked to fill out an online satisfaction feedback form (Appendix B) to determine how well they liked the approach taken by their section toward online assignments for this chapter.

Parameters for the MSU Denver study were slightly different. Researchers at MSU Denver were unable to mandate participation in this study, and only a small percentage of instructors volunteered to participate in the instructor-graded side. Instructor participants came from two levels of the introductory sequence: 1010 and 1020. The instructors who chose to participate did so by performing

instructor grading for one chapter of exercises. The number of computer-graded activities assigned was approximately seven times the number of instructor-graded activities. However, as at USAFA, due to the open-ended nature of the instructor-activities assigned it was estimated that all students would spend roughly the same amount of time performing the activities (see Appendix A). In all, 126 out of 411 students (31%) enrolled in both levels completed instructor-graded activities.

All students in the program took the same quiz at the end of the chapter (from the *¡Arriba!* text, Chapter 5 [1010] and 11 [1020]), and numbers were compared accordingly. The MSU Denver analysis followed the USAFA model, and all students in all sections were asked to fill out a satisfaction survey about MySpanishLab (using the same form as USAFA).

Results and discussion

At USAFA, an analysis of results on the chapter test yielded a confirmation of the initial hypothesis. No significant difference in performance existed between the two groups. In fact, the average chapter test scores overall were nearly identical (see Table 1). MSU Denver results yielded a similar confirmation of the initial hypothesis.

Table 1
Comparison of test results between treatment groups

Treatment group	USAFA test scores	Metro test scores
Instructor-graded group	158.68 / 200 (SPA 132)	62.44 / 100 (SPA 1010)
		64.9 / 100 (SPA 1020)
Computer-graded group	158.48 / 200 (SPA 132)	63.1 / 100 (SPA 1010)
		52.9 / 100 (SPA 1020)*

*Note for Table 1: An important consideration when examining these results: Metro students who dropped the course but had not been inactivated in MySpanishLab by their instructors were included in testing statistics as a 0% grade.

A comparison of the survey results from both institutions suggests that the most telling difference is in the preference for type of online assignments. Following testing, students at both schools were asked to submit answers to a

satisfaction survey (see Appendix B). The USAFA response to the satisfaction survey was at 65% (N=146). At MSU Denver, 52.5% of Ss responded to the satisfaction survey (N = 216). Among other questions, the Ss were asked to state their preferences for activity type: computer-graded, instructor-graded, or a hybrid of the two. The results from the USAFA survey are strikingly different from those obtained by the MSU Denver study (see Table 2).

Table 2
Comparison of survey results between institutions

USAFA Survey preferences	Metro State Survey preferences
24% preferred hybrid	68% preferred hybrid
70.5% preferred computer-graded	9.7% preferred computer-graded
5% preferred instructor-graded	18.5% preferred instructor-graded
.5% no opinion	3.8% no opinion

Interestingly, the Ss' performance on the chapter test did not reveal any significant difference in scores at either institution. Nevertheless, student learning preferences should not be discounted or summarily dismissed (Lightbown & Spada, 2006). Subjects in both studies indicated an overwhelming preference for a specific type of online activity, albeit different at each institution.

The explanation for the stark differences in survey responses may lie in the character of the institutions and their respective student bodies. Cadets at USAFA are under severe time constraints and are hard-pressed to complete all homework assignments for their heavy course load on a regular basis. Perhaps the expediency of computer-graded activities meets their particular needs in so far as course preparation. This type of activity is clearly less time-consuming to complete than the category of instructor-graded assignments, which necessitate a revisiting of each task to review, repair, and resubmit. Researchers at MSU Denver attribute the deviation of preference from students at USAFA to student body composition and "personality" of their learners. Students at MSU Denver are very concerned with their learning and are paying directly for their education. While many have time constraints just as compelling as those of USAFA students, perhaps they are more concerned with "getting their money's worth" out of their education. With this mindset, they appreciate both the rapid feedback

provided by computer-graded activities as well as the individual attention and instruction garnered through the instructor-graded tasks.

One rather troubling and perhaps telling result reflected in the survey was the USAFA response to question #6, directed toward those Ss engaging with the instructor-graded activities:

6. If you completed the Instructor-graded activities for Chapter 5, how often did you read the instructor feedback provided (please circle):

Every Time Most of the Time About Half the Time Rarely Never

Well over half of the Ss responding to this question indicated that they "rarely" or "never" read the instructor feedback. Clearly, if students are not willing to seek and reap the benefit of nuanced personalized instruction, such as that provided by individual instructor comments particular to student production, it begs the question of the worth of such additional and extensive effort on the part of the instructor.

Qualitative data extracted from the satisfaction survey at both institutions provided additional information about Ss' preferences and dislikes vis-à-vis MySpanishLab. Tables 3 and 4 address survey questions 8 and 9 in particular.

Table 3
Survey question #8: What do you like most about MySpanishLab?

USAFA	Metro State
• 30% Learning • 28% Feedback • 16% Ease/Availability • 13% Specific Features • Miscellaneous responses	• 22.2% Instant feedback • 10.1% Extra practice • 9.3% Ease/availability • 8.3% Work at your own pace • 6.0% Multiple attempts at same task • Miscellaneous responses

Table 4
Survey question #9: What do you like least about MySpanishLab?

USAFA	Metro State
• 37% Specific Features • 34% Quantity • 10% Timing/Time Spent • 8% Learning • 7% Quality	• 26.9% Time consuming • 21.3% No answer • 13% Frustrating • 11.1% Too many assigned activities • 4.2% No comprehensive feedback • Miscellaneous responses

For survey question #9, responses in this category included many complaints of a technological nature (unforgiving computers as opposed to understanding human beings; inconsistent Internet availability) as well as failure of completion of instructor-graded activities on both students' and instructors' parts. It is noteworthy that MSU Denver Ss' second highest response to question #9 was "no response"; in other words, these Ss had no dislikes!

No data were gathered to reflect instructor satisfaction, but some deductions can be made from results of the studies and attempts at further replication of the same. At USAFA, several Ss failed to complete the survey because some instructors simply did not administer it. In addition, several Ss commented in the survey that they either received no instructor feedback or what they did receive was not generated in a timely manner. In other words, complete instructor participation was lacking in the USAFA study. At MSU Denver, the small number of instructor volunteers is representative of a reluctance of the greater number of instructors to take on additional grading. It would also seem to support the initial hypothesis of their preference for computer-graded activities. When queried as to willingness to participate in a follow-up study, no one volunteered. This refusal to continue with the study speaks volumes in terms of instructor prioritization of time, preference for, and/or confidence in the employment of computer-graded activities for positive student progress.

LESSONS LEARNED

A number of lessons were learned as a result of this joint study. First, steps need to be taken to ensure the full cooperation of all instructors involved in any

future study of this ilk. They must "buy into" the procedures completely to facilitate optimal performance of their students and maximum collection of relevant data. As participation in the study at MSU Denver was voluntary, the instructors' desire to be included can be considered a key finding—initial curiosity during the first semesters of the adoption of this technology was high, and the need for understanding its impact seemed urgent. Nevertheless, their refusal to participate in the study in subsequent semesters is quite telling and indicates a developed preference for and confidence in computer-graded activities. Next, as indicated by USAFA student questionnaire responses, finding a way to require students to access and read instructor feedback must be developed. If students are not taking advantage of the additional instructor feedback given via the instructor-graded tasks, it is difficult to tease out the effect or lack thereof of this sort of assignment on student learning. Third, and related to the cooperation of all instructors included in the study, an improved response rate on the student satisfaction survey would yield more potentially useful data. Fourth, an instructor feedback form for gathering data on the study in general and satisfaction with the activities and grading methods would yield helpful information. Finally, restructuring the FL curriculum in order to optimize use of instructor time while concomitantly generating helpful feedback for students would seem to be a worthy goal.

While the variation in test scores between students who performed instructor-graded versus computer-graded homework exercises is roughly similar at both schools, the student preferences and dislikes regarding MySpanishLab as a learning platform clearly reflect differences in the respective student bodies.

The satisfaction surveys also confirmed some anecdotal opinions that had been present in the Spanish section of MDL at MSU Denver. This program had been one of the first in the nation to broadly implement the MySpanishLab platform, and many initial "kinks" in the system were being solved over the course of use during the first few semesters. Students expressed frustration with these technological glitches (e.g. initial lack of interface for Mac users, the need [at both institutions] to make sure that all applicable plug-ins and other in-system tools were appropriately installed and available in student-use computer labs, on students' personal computers, etc.). It became clear during the first semesters of use that there is a need to be pro-active and vocal when the technology does not work and a need for dialog with the publishers to identify these errors and solve system malfunctions in future iterations of the platform. Also identified was the importance of reporting what *does* work--in other words, the experience of

adopting this platform and the student response to its use has highlighted the importance of rejecting "passive technology use."

PROGRAMMATIC CHANGES DUE TO THE STUDY

For both universities the study highlighted the need to closely examine how language learning technology is used in FL classrooms in the future. Despite any questions that still remained following the examination of study results, both universities were able to identify concrete takeaways that directly affected program design and instructional delivery.

Given the lack of appreciation for instructor-provided corrections on homework assignments and the effectiveness of the immediate feedback on computer-graded exercises, USAFA discontinued using the instructor-graded MySpanishLab activities in the elementary Spanish course. The course was reconceived as a hybrid of classroom instruction combined with computer-based MySpanishLab reinforcement self-study. Approximately 30% of the academic calendar was set aside for MySpanishLab so that cadets could do the activities at their own pace during class time under the supervision of an instructor. If, however, cadets were absent due to illness, participation in sports or any other reason, they could do the work wherever they could find Internet access. Besides freeing instructors from the drudgery of manually grading homework, an additional consideration was that multiple sections meeting during the same class period could be combined in a small lecture hall and supervised by a single instructor, further freeing up faculty time. Overall, this hybrid arrangement gives students more control and responsibility for their own learning while allowing faculty to concentrate their time and energy on classroom instruction and individual tutoring during office hours.

Similar programmatic changes took place at MSU Denver. As student responses indicated a clear predilection among MSU Denver students for instructor participation in their work in combination with the ease and instant feedback of computer-graded activities, subsequent courses at MSU Denver were designed with this hybrid combination of workload in mind. While still maintaining the uniformity of a consolidated departmental program, individual instructors have been given more flexibility with regard to augmenting the common and shared base of computer-graded activities with instructor-chosen and instructor-graded activities that they individually assign. Additionally it was learned that, by assigning fewer "busy work" activities, the time spent on

computer-graded activities could be decreased and the meaningfulness of student work could be increased. Consequently, instead of formally assigning all activities in MySpanishLab for any given chapter in the introductory sequence courses, the program coordinator now establishes a baseline for minimum participation that does not include activities identified by students and instructors as comparatively less valuable. The study results allowed MSU Denver to make an informed move toward the development of a more hybrid, plural, yet individualized approach while maintaining the integration of technology in the language learning classroom—in essence, the study allowed MDL to meet the needs of both the students and the program.

A foundational outcome for both universities was that the way any program is designed around technology must truly fit with the personality, learning styles, and desires of student learners. In order to do this, student performance and preference must be continually assessed, and programmatic changes must be implemented in accordance with assessment results.

CONCLUSION

It is interesting to speculate on the reasons for the data differentials that did surface. It is certainly possible that these differences are illustrative of the dissimilarity of the two student populations. Indeed, defining characteristics of the Ss such as personality, academic preparation, attitude toward the institution, and even reasons for college enrollment may figure into the disparity in preference for online activity type. Some stated dislikes due to technological problems can obviously be ameliorated by working more closely with the publisher of MySpanishLab, identifying system malfunctions and errors in feedback. As discussed above, differences among instructors vis-à-vis attitudes toward the use of technology and their implementation of the text in general and the online activities in particular may have caused some of the data variances. The resulting data do inspire further inquiry that may lead to improved teaching and learning in FL classes at the university level.

Questioning the efficacy of formative versus summative activity types within language learning technology platforms can illuminate the benefits and disadvantages of contemporary textbooks and ancillary materials for the 21st-century learner. More thoughtful consideration of students' activity preference, in combination with instructional design that is driven by positive assessment data, can enhance the already strong teaching being performed in diverse types of

universities. Responsible and intelligent use of language learning technology can offer students and instructors alike a variety of choices that can tailor a program to a high level of satisfaction while leveling the field in terms of student performance and learning outcomes. Further research along these same lines has the potential to generate more fruitful data that can affect programmatic change. The benefit of improved FL learning for students will be a most positive result.

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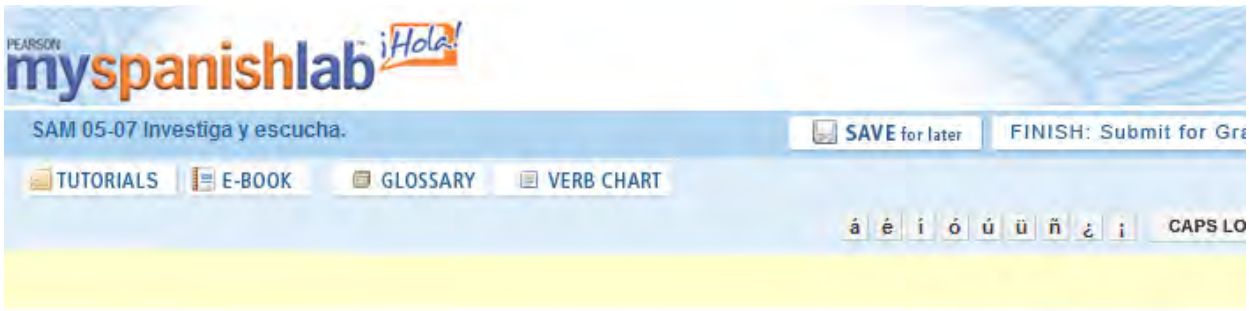
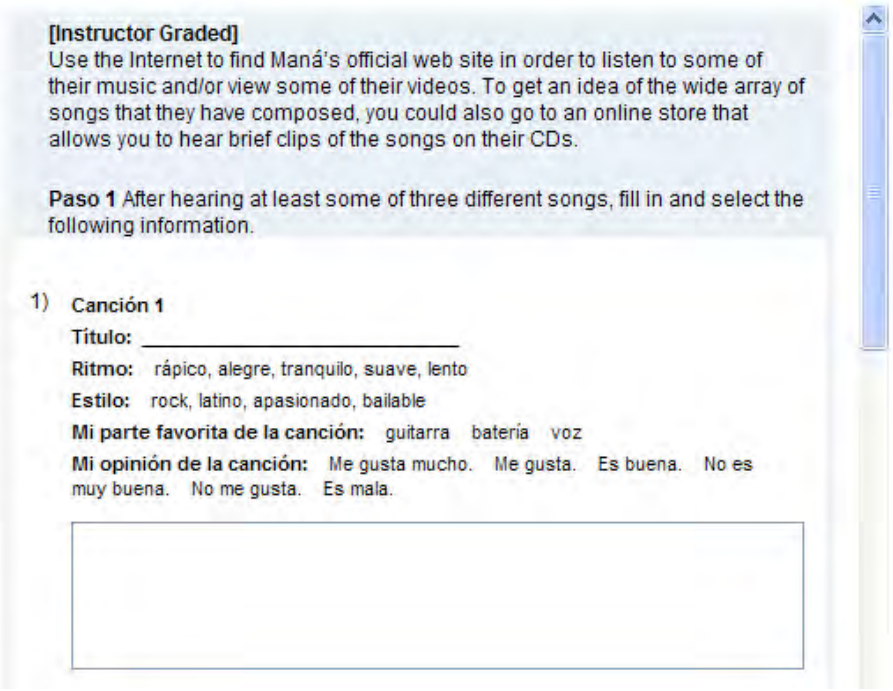
APPENDIX A

INSTRUCTOR-GRADED ACTIVITY SAMPLE





[Instructor Graded]
Use the Internet to find Maná's official web site in order to listen to some of their music and/or view some of their videos. To get an idea of the wide array of songs that they have composed, you could also go to an online store that allows you to hear brief clips of the songs on their CDs.

Paso 1 After hearing at least some of three different songs, fill in and select the following information.

1) **Canción 1**
Título: _____
Ritmo: rápico, alegre, tranquilo, suave, lento
Estilo: rock, latino, apasionado, bailable
Mi parte favorita de la canción: guitarra batería voz
Mi opinión de la canción: Me gusta mucho. Me gusta. Es buena. No es muy buena. No me gusta. Es mala.

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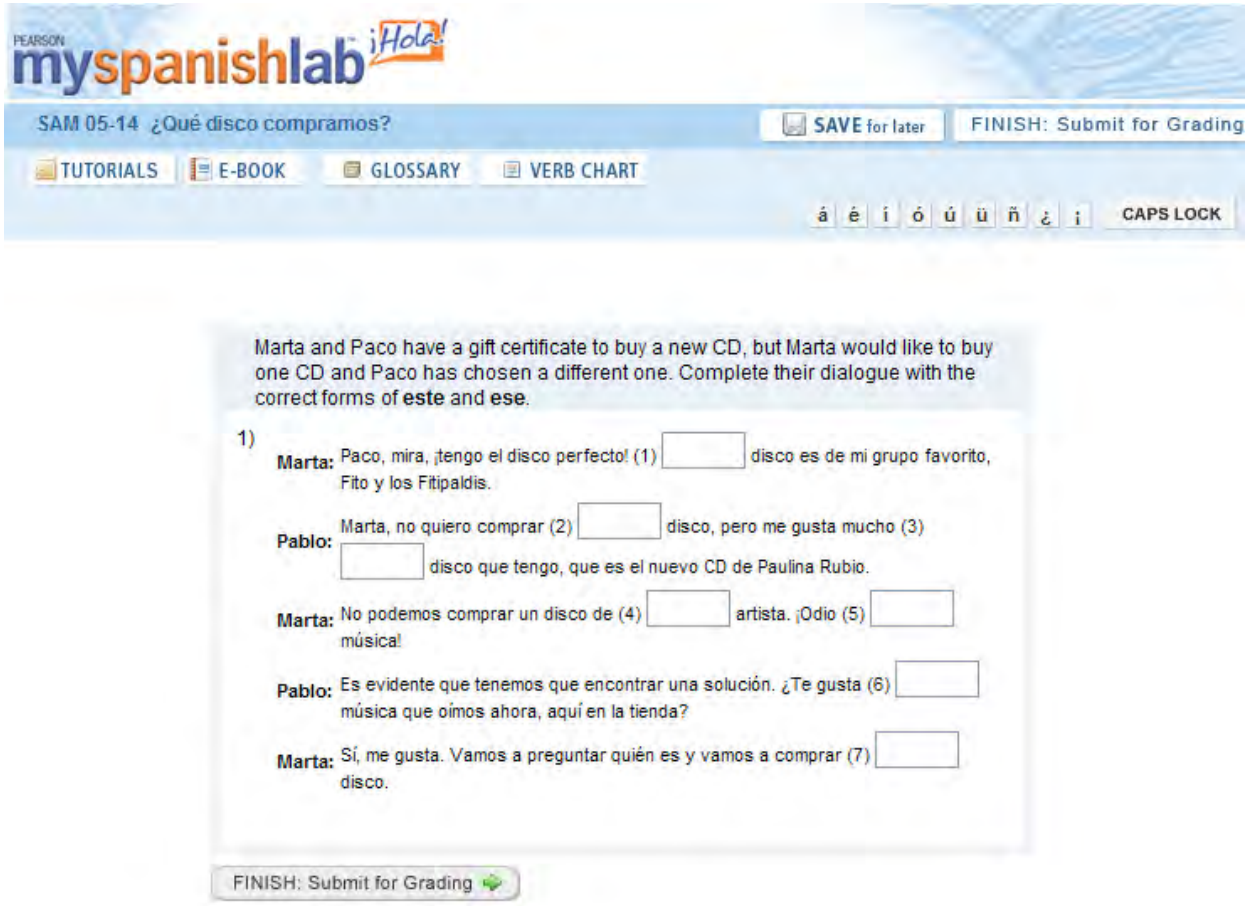
COMPUTER-GRADED ACTIVITY SAMPLE



APPENDIX B: CADET FEEDBACK QUESTIONNAIRE

1. Did you do the "Readiness check" for this Chapter? _____ yes _____ no

2. If yes, how useful was it? (please circle)

Very useful somewhat useful not at all

3. Please circle the type of MySpanishLab activities you completed for Chapter 5:

i. Computer-graded ii. Instructor-graded

4. Compared to the hybrid approach of previous chapters (i.e., both some computer-graded activities and some instructor-graded activities), do you believe that the single type you were assigned this chapter enhanced your learning? (Please circle)

Greatly Enhanced	Somewhat Enhance	Neither Enhanced nor Detracted	Somewhat Detracted	Greatly Detracted

Comments:

5. Do you agree with the following statement: "I would have learned as much if I had the other type of homework activities."

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

Comments:

PARTICIPANTS WITH INSTRUCTOR-GRADED ACTIVITIES ONLY (Cadets with Computer-graded activities please go to Question #9):

6. If you completed the Instructor-graded activities for Chapter 5, how often did you read the instructor feedback provided (please circle):

Every Time Most of the Time About Half the Time Rarely Never

7. Do you agree with the following statement: "The instructor feedback helped me better understand the material related to that particular activity."

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

8. Do you agree with the following statement: "Overall, the instructor feedback enhanced my learning as measured by my performance on the exam."

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

Comments:

ALL PARTICIPANTS:

9. What do you like most about MySpanishLab?

10. What do you like least about MySpanishLab?

11. For Chapter 5, how much time do you estimate that you spent on MySpanishLab activities: _____(min/hours)

12. Any additional comments about MySpanishLab:

13. If given the option, which type of activity would you prefer: (please circle)

a. Computer-graded only

b. Instructor-graded only

c. Hybrid (both types)

Why? Please explain.