

TEACHING SPANISH WITH MULTIMEDIA

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CHAPTER 1: INTRODUCTION

Teaching a foreign language, like Spanish, incorporates various aspects of communication. Not only am I teaching how to speak the language but also how to listen, read, write and identify cultural impact on comprehending the second language. All of these aspects of communication rely upon the acquisition and embedding of a considerably large amount of vocabulary and numerous grammar concepts over the course of study in high school.

Just the mention of grammar sends even the most ardent high school Second Language students into a negative state in which their attention can be distracted by anything and everything. Then to that problem add that of motivation. In my teaching experience I have found that the average teenager is taking a second language due to a requirement for graduation, college entrance, scholarships; or possibly their parents are pushing them to take language because it is “important.” Either possibility takes its own toll on student motivation. This is not to say that there are not students that are truly interested in second language learning; it is just that this interest is not the “norm.”

This lack of interest leads to poor study habits, which in turn can lead to poor assessment scores which can lead to poor grades. Typically once parents realize the state of the student’s grade I receive a call or email asking how to help the student. My standard answer is that the student needs to take the initiative to complete the practice enough times that he understands the practice’s concept and can demonstrate it reliably; the amount of necessary practice is dependent on the student’s needs and his strategies for learning. These students require more to stimulate them than just their own token motivation. I am always looking for more ways to help students

learn and ways to motivate them. The number of students/parents that are interested in supplemental instruction has inspired me to create that instruction.

One obvious possible solution that came to me was the use of computers and multimedia. We live in the technology age in which the majority of students have had access and training on a computer and/or software games. Students will miss school on days that new games are released on the market to stay at home and play for hours at a time. Students will be on computers and online the Internet for hours on end. This leads me to conclude that a large number, possibly the majority, of students not only has access but has come to expect the use of multimedia and technology as an everyday occurrence. The textbook and pencil-and-paper exercises can't really compete with technology's action and attention-grabbing antics. Thus my project is to examine the use of multimedia in teaching Spanish to see if that will stimulate more motivation to do the necessary practice for second language learning and, if so, how to effectively teach the different aspects of second language learning.

CHAPTER 2: REVIEW OF THE LITERATURE

A. Hede believes that research on instruction that incorporates multimedia is often characterized by inconsistent findings. He feels that these inconsistent findings concerning instructional technology incorporating the use of multimedia and its demonstrated impact on learning are due to the numerous elements that can influence learning. He observes that these often contradictory findings are due to uncontrolled variables that moderate the variables under investigation. He identifies twelve main elements which are variables. Typically the independent variable is learner style, the dependent variable is achieved learning. The remaining elements that impact the given variables are visual input, auditory input, learner control, attention, working memory, long-term storage, motivation, cognitive engagement, intelligence and reflection; the findings are further complicated by the elements' complex interrelationships (Hede, 2002). The elements most often associated specifically with language learning are basically the same, but the one that I am most concerned with in this project, as mentioned in the introduction, is motivation.

Multimedia and Motivation

According to Professor Peled in *Campus-Wide Information Systems*, researchers at Stanford University conducted the first experiment utilizing computers as learning tools, for teaching science, during the late 1960s. He goes on to say that during the 1970s, computer conferencing systems enabled archiving group learning activities and discussions. The article continues that in the early 1980s computer networks contributed to a newer academic computerized learning environment. Furthermore, Peled says that the start of the web revolution

began in the mid-1990s, and the impact on computerized learning environments was incredible. He concludes that by the mid-to-late-1990s the first WWW-based learning environments had originated and encouraged the use of Internet in academic learning settings. Teachers were generating lessons containing objects such as photos, maps, video clips, CD-ROM disks and WWW files. Others were using WWW sites to distribute and collect tests, survey the opinions of their students, engage them in discussion groups and Internet chats, and guide students in how to find useful resources on the Web (Peled, 2000).

Originally, technology contributed static opportunities for learning language such as drill and practice applications, audio language labs, etc. which were more often than not labeled by students as boring although functional. Current technology provides a tremendous amount of stimulating possibilities to enhance the teaching and learning of a second language using authentic resources such as electronic newspapers, asynchronous or synchronous communication, e-mail pen-pals, video conferencing, links with pedagogical suggestions on how to use sites and course websites. Nevertheless, the incorporation of technology must be planned and organized to prove beneficial for learning. Based upon a research review conducted by Hill and Slater, professors at the University of Brighton in the United Kingdom, they concluded “technologies have the power to stimulate, excite and motivate learners in ways which are far beyond the reach of a teacher working alone in a traditional classroom...Learners respond positively to opportunities which enable them to explore ideas, to exchange information, to ask questions and to meet electronically with learners from other cultural backgrounds, particularly those related to the language they are studying” (Hill, 1998). Their purpose for such a review was to balance the enthusiasm for including technology with the support through data of the idea that successful innovation isn't about the technology itself but about the learners who use it.

Educational technology designers responded to the market demands by producing computer-based multimedia environments for many content areas. However, questions regarding the effectiveness of the environments and tasks were raised, causing some to wonder whether multimedia would help teachers and students develop deep conceptual understanding, or whether it would produce a generation of passive “couch potatoes” waiting for infotainment (Nelson, 1999). The authors deduced that designers of educational multimedia computer systems prefer to believe that student users are not merely passive viewers; considerable time is spent to ensure that the systems conform to appropriate design principles based on sound learning and instructional theories. Products such as computers permit many possibilities for interactions. Computer usability is generally based on the degree to which computer software assists a user in completing tasks. In a Nelson, Bueno and Huffstutler article in the *Journal of Research on Computing in Education*, usability is defined as the combination of learnability, efficiency, memorability, and user satisfaction, and should be centered on sound principles that exhibit natural non-technical dialogue between the system and user, consistent interface features, minimal memory load on the user, user error prevention, and appropriate feedback in order to facilitate/enhance learning. This leads to the conclusion then that educational software should address the design of learning activities and the learner’s ability to control sequence, pacing, presentation medium and level of difficulty in order to sustain motivation and to encourage adequately successful learning.

In 1996, Nelson, Bueno and Huffstutler, professors at Southern Illinois University, decided to conduct a case study on a comprehensive multimedia learning environment for beginning Spanish classes based on the fact that the required traditional language lab supplement to classroom instruction was labeled boring and was not conducive to student learning. The team

understood the need to completely redesign the lab activities. They conducted a literature review on second language acquisition. During their research they discovered that it would be necessary to create a paradigm that emphasizes a language-rich environment in which learners are provided access to the target language from multiple types of sources that promote genuine communication on topics of students' interests and ideas (Nelson, 1999).

Nelson, Bueno and Huffstutler found in the research that, in order for Foreign Language students to acquire the new language, the key to developing deep second language understanding depends upon frequent and engaging interactions (recognizing, remembering, rehearsing and associating meaning with words and phrases) coupled with authenticity and familiar contexts. Their design began with content analysis, identification and the appropriate sequencing of learning outcomes, and development of instructional strategies and learning activities, all of which were reviewed by an instructional design specialist and an instructional content expert. Their design process followed a rapid prototyping model which allowed them to incorporate user/tester experiences and feedback, and revisions into the continuing process of designing more effective modules. They created an initial module with video and audio content and a series of learning activities based upon the standard formats of fill-in-the-blank, matching, multiple choice and short answer. Learners were given control of the activities as they were not required to complete an ordered series of activities, allowing them to use different learning strategies and repetition of an activity if the need was perceived (Nelson, 1999).

The tremendous amount of data from the Southern Illinois University study was not limited to user perceptions through observations, questionnaires and oral proficiency interviews but also relied upon the interface itself that logged data of student use. The log supplied a list of user activities and the sequencing patterns which were later broken down into matrices of the

number of times one activity was followed by another. Learners then were identified as belonging to the categories of browsing, channel surfing, linear and tentative. As the semester progressed, data demonstrated that all categories of students were developing target language skills as well as inventing learning strategies that relied upon multiple features and resources of the interface. The students' control allowed them to use the various resources to construct meaning, to obtain the interactions that they needed and to use them in such a way to meet their individual needs, and to use self-evaluation strategies and more complex interactions. The analyses and data identified not only the categories of learners based upon their input but also which features best supported learning and how the students used the features to learn. The study proved to support their goals for learners, yet raised further questions to research: Does the user's desire for feedback come from prior knowledge of other instructional software or is it a basic principle of learning with computers? How can learners be encouraged to explore and create individual learning strategies dependent upon the interface? and When does "feature overload" occur? (Nelson, 1999)

In 2001, Yeh and Lehman conducted a study that investigated the effects of learner control and Foreign Language learning strategies on Second Language learning from hypermedia lessons. Their literature research revealed extensive investigation (though rarely addressing second language learners) on the issue of learner control in multimedia instruction concluding with contradictory findings. They cited a meta-analysis from 1998 which concluded that 25 of the 35 studies examined, multi-media-based instruction is superior to traditional instruction and confirmed the positive result with a subsequent meta-analysis of 46 different studies in 1999. Yet a review of another meta-analysis that they discovered involved 30 experimental studies in which little evidence was found that multimedia improves comprehension. Their literature

review also identified studies in which instruction in both auditory and visual modes of identical and simultaneous information can cause a split in attention. This is the basis of the cognitive load theory in that the working memory can be overloaded by redundant information.

Following the study in 2001, Yeh and Lehman then proposed an integrated model of multimedia instruction that would identify the main variables impacting multimedia effects. They determined that these main factors are visual input, auditory input, learner control, attention, working memory, motivation, cognitive engagement, learning style, intelligence, reflection, long-term storage, learning and interaction among the various factors; these factors are the same factors that are examined frequently also as impacting the teaching of foreign language, reading, etc. However, they do caution that “the new and emerging instructional technologies used by multimedia are only tools—unless they are applied with careful regard to the complex nature of human information processing, they can have a detrimental effect on learning.”

A study on “Flow” theory of motivation in the foreign language classroom by Joy Egbert also tied into the use of multimedia/computers in instructional activities. The definition of flow for learning in general is an experiential state characterized by intense focus and involvement that leads to improved performance on a task, or an optimal experience. Flow researchers have found that the following conditions occur during flow experiences: a perceived optimal balance of skills and challenge (dependent on culture) that leads the participant to explore, opportunities for intense concentration and automaticity, clear task goals that are intrinsically interesting or authentic, feedback that one is succeeding at the task, a sense of control and degree of decision-making, playfulness/enjoyment and a lack of self-consciousness, and the perception that time passes more quickly. Flow theory claims that as a result of the intrinsically rewarding experience associated with flow people push themselves to higher levels of performance. Most

participants in flow theory research report that the experience results from performing activities that they have chosen and in which they have an intense interest. Flow, then, leads to more time on task which in turn leads to changes in learner's skills. However, the report states that adolescents in school settings appear to rarely experience flow. Based on the information cited in Egbert's study, the secondary Foreign Language teacher's goal should be to provide the most interesting and relevant input focusing just beyond the learner's competence so that they can understand most of it but are still challenged to make progress which encourages the learner's intense focus and involvement, thus obscuring that the message is encoded in another language.

In the literature review, flow study participants claim to experience flow during reading and computer tasks more than during any other school-related activity. Computer tasks support flow because they most often include reading, optimal levels of challenge and control, non-judgmental feedback, the option of being anonymous, focused attention on a limited field, and varied interesting or unique stimuli. Egbert's findings indicate that flow experiences are possible in foreign language classes and that the higher the opportunities to experience flow, the more likely the participants were to perceive it (Egbert, 2003). The findings also indicate that teachers can facilitate the flow experience by developing tasks in consideration of the conditions required for flow experiences. Her study's participants interacted with native Spanish speakers (authentic) in Spanish and had some control over parts of the task. The supporting data imply that computer-based interactions provided authentic opportunities which are not provided in the regular classroom. The drawback to this study though was that although general learning was shown to occur, specific language objectives were not addressed.

Foreign Language Reading and Writing

A 2004 study by Rosa and Leow, professors at Georgetown University, investigated the impact of task features on how foreign language is processed by secondary-level learners. They examined the features of essentialness, explicitness and feedback by examining whether processing a Spanish structure (the use of the conditional tense with the subjunctive mode) through a series of computer-based tasks differing in the degree of explicitness had an impact on the learners' subsequent ability to recognize and produce the target structure immediately after exposure and also over time. They defined "task" not only as a potential influence on automatization of already internalized concepts but as also a means of helping learners focus on formal aspects of foreign language learning. The tasks included were on comprehension of input, not on output language production. Explicitness was examined by altering the amount of grammatical information the learners received on the target structure, either in terms of feedback or explanation prior to the task. Rosa and Leow determined by use of an Analysis of Variance that there was no significant pre-existing differences in the participant groups (made up of varied combinations of the features: essentialness, use of a pre-task, and feedback) at the outset of the study. They also determined through statistical analysis of mean scores and standard deviations that: 1) the types and degrees of explicitness of the learning conditions and feedback concurrent to input do positively affect learners' ability to generalize their knowledge to novel stimuli immediately after exposure and three weeks later, 2) processing foreign language input through a problem-solving task is an efficient way of helping learners internalize the target structure, and 3) the advantages of processing input were more evident in production of old and new items, and in recognition of new items but not in recognition of old items. In my world, this translates as support of problem-solving tasks as effective teaching tools or as the need for tasks that promote

noticing target forms during instruction. This study also encourages the use of computer technology in Foreign Language instruction due to immediate availability of feedback and extended active interaction. Since relatively few studies have been conducted on how the explicitness of the learning condition of computer-based tasks impacts Foreign Language development, the findings should not be generalized without caution and examination of context and learner population (Rosa, 2004).

I believe that internalizing grammar concepts is only one aspect of language learning. I believe that vocabulary acquisition is equally as important for comprehension, whether listening, writing or reading. My beliefs are justified by studies by Dorothy Chun and Jan Plass. They conducted a series of three studies in 1996 on the effects of multimedia on vocabulary acquisition. In their research review, they found that in multiple studies the retention of word meanings in incidental learning (text comprehension) is low, i.e. Foreign Language learners reading a text for comprehension have a slim chance of remembering the meaning of a word that occurs only once; low verbal ability students who use a dictionary generally learn more words than those that do not; students who use computerized dictionaries have significantly better scores on vocabulary quizzes than students who do not work with computer programs; second language vocabulary associated with pictures are learned more easily; and that bimodal verbal input (video input combined with subtitles) increase vocabulary acquisition. They found no current research that combined the different conclusions for vocabulary acquisition, the effectiveness of multimodal glosses/annotations within a computer program on vocabulary acquisition. The studies that they conducted varied in the size of sample used; studies 1 and 3 consisted of 36 and 21 participants while study 2 used a larger sample size of 103 participants. Studies 1 and 2 used a short version of vocabulary test and study 3 used a different longer

version. Although the results of the studies indicate higher rates of incidental learning of vocabulary due to the use of picture + text annotations, more factors were also identified as impacting learning, i.e. the use of video vs. still pictures on vocabulary retention, cognitive learning styles, pictures and texts impact on grammatical concepts, etc.

Jan Plass went further, conducting a study with Linda Jones in 2002, on the effects of multimedia annotations upon listening comprehension and vocabulary acquisitions both immediately and then after a delayed period of time. Their findings indicate that students learned best with pictorial annotations with written annotations available. I conclude then that multimedia learning environments should offer both pictorial and written supplements for effective aural comprehension and vocabulary acquisition and to enable long-term comprehension and vocabulary acquisition.

Oral Production and Multimedia

Learning Foreign Language pronunciation and oral production is large part of mastering a second language and is usually acquired later than the reading and writing segments (Camps, 2002). Reading and writing in a foreign language allow the learner more time to process and “work out” what he wants to say whereas oral production is most effective when instantaneous. Typically this process is further elongated by the fact that Foreign Language speaking and listening is practiced most often inside the classroom and not in the everyday world. According to Golge Seferoglu, a teacher educator in the Department of Foreign Language Education with a doctorate from Columbia University, there have been very few studies that have tested the effectiveness of computer-assisted pronunciation training. Seferoglu’s study, discussed in the British Journal of Educational Technology in Summer 2005, was based on a quasi-experimental

pretest-posttest control group design. The participants were two senior year classes of foreign language education. Both groups were given a pronunciation pretest to establish performance at entry. For three weeks the experimental group used an accent-reduction software during the school's required language lab time; the control group followed regular pronunciation instruction. Both groups followed instruction that covered the same curriculum. The pretests and posttests consisted of 10 minute presentations and were rated by the researcher in person and were also videotaped for another rater in order to establish inter-rater reliability. Both raters were non-native speakers. The pretests established that both groups had approximately full communicative efficiency. After the three weeks instruction, the experimental group improved and the control group displayed a change in the reverse direction. The study claims to support the premise that technology, i.e. computer software, exposure can improve pronunciation in isolation. However, in my experience, I would caution that it should not be assumed that improved pronunciation will carry over to actual conversation.

Culture and Multimedia

Most foreign language instructors would agree that “language without culture can degenerate into a study of forms and vocabulary; ...culture instruction is what brings life to language learning” (Shook, 1998). Most often Spanish language students are not close distance-wise to the Hispanic cultures that are being studied. Without proximity, these students are likely to assume cultural stereotypes and demonstrate inadequate or faulty insight into the belief systems and consequential behavior of those cultures which in turn deters communication. It becomes vital that the students' class work gives them a better understanding and appreciation of

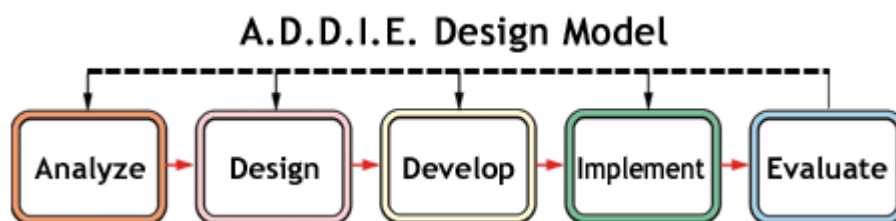
the multiple Hispanic identities. At the same time, they can learn about and appreciate their own culture and relationships between cultures.

David Shook, in the *Canadian Modern Language Review* January 1998 issue, proposes student-led investigations and multimedia presentations as a beneficial approach toward overcoming inaccurate cultural generalizations and promoting better understanding of cultural identities and interactions that will lead to more successful communication. By using Internet and the WWW, students are motivated to access authentic written materials on behavioral, lifestyle and religious aspects of culture, oral and video clips of authentic regional language and pronunciation, and Spanish characters on the computer keyboard for use in presentations.

A final research study that I encountered on the stereotype of native expert knowledge in the classroom does merit contemplation. Maria Jose Alvarez-Torres and two colleagues from Michigan State University conducted a study to examine stereotypical categorization of computer programs based on superficial cues (accent, gender) and the effect on text recall. Their research into human-computer interaction indicates that people interact with a computer more so than if it was just a tool or cognitive medium of instruction. They cite research that indicates that “people react to computers as if it were another human being—read gender and personality into machines, are polite to machines, are flattered by machines, are flattered by them, treat machines as teammates, get angry with them and punish them...this stance appears to be unconscious, instinctual, and independent of age, experience, or expertise” (Alvarez-Torrez, 163). Their literature review also supplied the findings that both men and women are more influenced by a male computerized voice than a female one, and that a computerized voice with a native speaker’s accent is perceived to be more expert and language knowledgeable. In their study, the foreign language environment was a computer-based tutorial and was examined for learners’

perceptions of the tutorial and their recall of tutorial's information. Participants in the study were male and female college student volunteers. The study oriented the learners with computer interaction using a female voice to give instructions for the program in both the native and the nonnative tutorials as the teachers to which they were normally exposed were female. The nativeness of the program was varied through native/nonnative accent, the use of assigning a name to the program, and identifying a country where the program was supposedly developed. Their study found that stereotypes did impact information recall under the assumption that native speakers know the language better, that participants did assign a distinct personality to the tutorial and behaved accordingly.

CHAPTER 3: INSTRUCTIONAL DESIGN MODEL



The ADDIE model is a generic instructional design model that provides a systematic framework that can be used by any instructional designer to ensure efficiency and effective instruction that meets the identified goals of the instruction. Being a novice instructional designer, I felt the need to have a specific framework that would keep me on track, that is easily understood, and that provides an evaluation at every phase to ensure adequate instruction.

Over the nine years of my teaching experience I have had a tremendous amount of opportunities to visit with parents and students, and to also observe firsthand the challenges that a Spanish 2 student encounters. Spanish 2 is often identified as the “hardest” level of Spanish courses and for good reason. The largest portion of the Spanish 1 curriculum is teaching the system or methodology for learning a foreign language. The curriculum also focuses on introductory vocabulary and beginning grammar concepts: approximately 2-3 concepts for each of the 12 chapters covered and the present tense. At the end of Spanish 1, students are just beginning to get an overview of past tense. Spanish 2 curriculum relies upon the retention of the complete Spanish 1 curriculum and then adds 8-9 more tenses in a single year along with the regular number of 2-3 grammatical concepts per chapter. The amount of knowledge to retain is considerable. Most Spanish 2 instructors believe that the second level course moves at such a fast pace, dictated by the setup of the sequence of texts and courses, that the content can be

somewhat overwhelming. This feeling of being overwhelmed and unable to retain adequate amounts of the content creates havoc for students that are already struggling due to other issues. It would be advantageous to find a tool to supplement the instruction in such a way as to enable these students to experience success.

Analysis

In the analysis phase, it is vital to assess both the needs of the learners, context and the needs of the instructional plan while weighing the constraints of the instruction. This project became a logical sequence of planning and implementation of supplemental instruction for my Spanish 2 course. My students could benefit from a collection of vocabulary and grammar concepts that they had already covered previously where they could check their comprehension and retention of the information with alternate methods of instructions and practice that they would be more evidently willing to access than the textbook or one-on-one tutoring. They could also benefit with additional practice on the instruction that they are receiving currently. My curriculum could benefit with another means of reviewing previous instruction as reviews in the course text are extremely limited in time and space, and students do not have access to texts from the previous year.

After analyzing the parent conferences, student problems and observed behaviors and difficulties of my students, I decided to investigate the possibility of using multimedia as a means of motivation and as a means of supplemental instruction. I first conducted the research review that is reported in Chapter 2 to check feasibility. My review of the literature did indeed indicate that multimedia should be effective, beneficial and advantageous in Foreign Language

(Spanish) teaching and learning. Then I decided to verify further by surveying the needs of my Spanish 2 students (see Appendix A).

Important findings from the survey that support research findings were:

- 56.6% prefer computer assessment vs. 41% prefer paper and pencil assessment;
- 92.5% have two years or more of computer experience, 83.75% have more than three years;
- 62% already use the computer for homework;
- 75% use the Internet;
- At least 76.5% are proficient with Word, Excel, PPT, Publisher, Paint, downloading, computer gaming and electronic mail;
- Instructional methods most preferred are modeling that identifies procedural steps, audiovisual combinations, and interactive;
- Instructional methods least preferred are audio only or written only;
- And, written instructions are extremely important, audio instructions are moderately to highly important, interactive instruction is highly important, demonstration is the most important type of desired instruction.

Therefore, I decided to create a supplemental instructional package consisting of computer-based activities and practice that is based on the research and survey findings. This will accompany what I normally teach in a Spanish 2 classroom instructional unit to test the hypothesis. Although I assume that all students could benefit, I stress supplemental as the students that I am most concerned with helping are those students that need more or varied learning style activities to internalize the vocabulary and concepts to the point of automaticity, or the students that are unable to voice the need for additional help in person.

Design

During the design phase, the designer must specify the learning activities, assessment, methods and media to be used to develop the instruction. I am creating a website, <http://studentaccess.emporia.edu/~mmendoza/helpweb1/index.htm>, currently accessible on my iDrive by participants, as a supplemental instructional package that could be accessed at school, at home or where computer access is available. The site will address the vocabulary and grammatical concepts that are in the Spanish 1 and 2 curriculums. The instruction is multimedia and incorporates computer-based activities incorporating audio, visual, modeled and interactive instruction, and practice that is formatted based on the research and survey findings of preference for modified T/F (false answers must be corrected, correct answers must be justified), matching, and short answer creation.

Development

During the development phase, instructional activities are produced. Formative evaluation also takes place so that revisions can be made to faulty areas of instruction. I have created vocabulary practice for my Spanish 2 course textbook Unit 4.1; the vocabulary is divided into four sections, and are pronounced and interactively practiced separately in pictorial view. I have also created instruction for the present subjunctive tense using desire indicators, incorporating audio, visual and interactive instructions for varied learning styles and a game-format practice for additional motivation. Further I have created instruction for previous initial sections of present subjunctive with impersonal phrases indicators, the irregular present subjunctive verbs, and comparison of subjunctive vs. indicative mood. After completing the

formative evaluation of this unit to check for needed alterations, I will produce the instruction for Unit 4.2.

Implementation

In the implementation phase, designed instruction is put into use with the identified learners. Participants' reactions, behaviors and progress must be monitored to allow for further revisions if needed. I implemented the instruction on March 28, 2006 with the opening vocabulary for Unit 4.1. The web address for the supplemental instruction was supplied to all students on that date. Students were reminded to use the supplemental instruction webpages on the days of concurrent traditional instruction throughout the two weeks of instruction. Typically approximately 44.5% do not complete vocabulary practice homework; incidentally also 44.5% self-reported that they did not complete the supplemental practice. Originally I had thought that the comparison was disheartening, but after further thought I realized that the numbers were not accurate for either assignment; traditional homework can not be verified as done by the specific student outside of the classroom and the supplemental is self-reported and, although acceptable, could also be unreliable. I will need to find other means of evaluation that are more valid and/or reliable for comparisons. Again, formative evaluations will still most likely be dependent on self-reporting and teacher or parent observation.

The seventh day when the present subjunctive desire indicators were introduced, students discovered that I had not uploaded the practice correctly to the website. I installed the practice onto my classroom computers and all students opted to participate in the multimedia practice during class. Each student then turned in feedback on how to improve the practice. On this practice, all students did verifiably participate and 90% reported favorable experiences, i.e. they

would also do this kind of practice on their own time. They did find a problem with the randomization of the questions in the game-practice that will need to be corrected for the next round of implementation.

Evaluation

In this final phase of this implementation, all phases must be reexamined to check for needed revisions. The problems with the designed instruction need to be rectified before allowing the final version to be released for regular implementations into the curriculum. There should be periodic checks to ensure that the instruction continues to be effective or to verify that the instruction can be improved or rejected for further use.

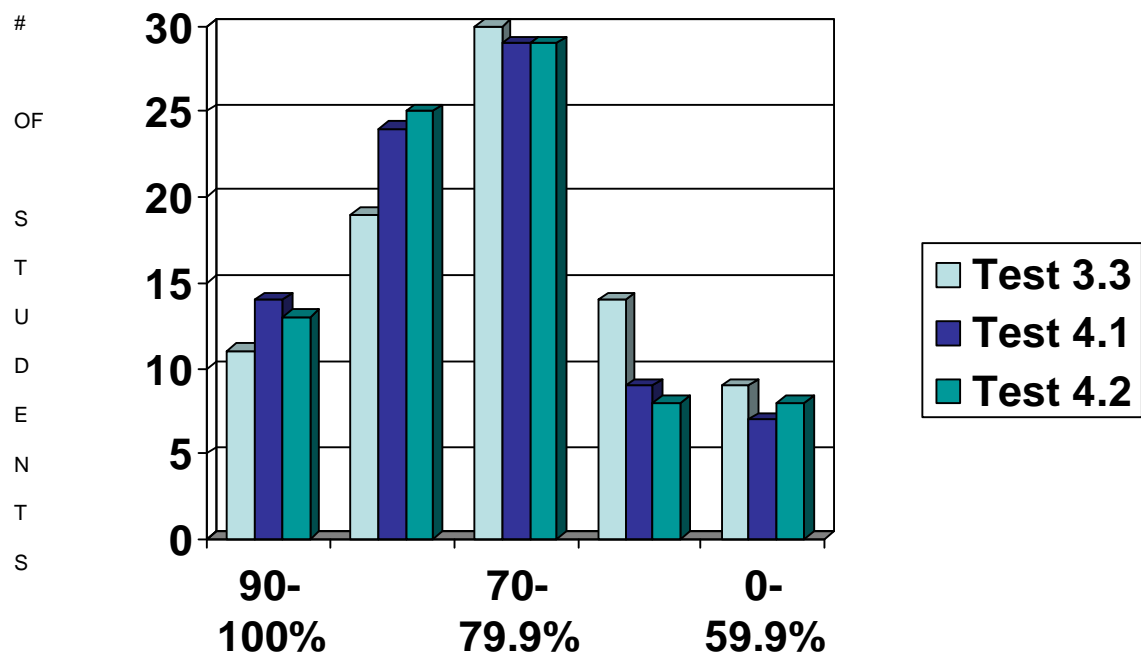
I have determined from the self-reporting and student input some modifications for the second unit of instruction. In unit 4.2, I included vocabulary visuals when feasible; I also added vocabulary practice that went beyond comprehension into application.

CHAPTER 4: RESULTS

The students have repeatedly given positive feedback to the supplemental instruction and practice. Multiple students have talked with me at length about how they appreciate having somewhere to go with questions when not at school and how they appreciate that the instruction is produced for various learning styles, especially the modeling and sequential steps for using the present subjunctive tense, the audio files for vocabulary pronunciation, and the vocabulary practices that are based on reading comprehension. Above and beyond that, students have expressed that it is very beneficial to have so many concepts from the previous year that they no longer are sure about or feel proficient with.

Besides the student feedback to judge supplemental instruction effectiveness, I have compared tests score and how they are distributed for unit 3.3, the chapter of instruction before implementation of the multimedia supplemental instruction, and units 4.1 and 4.2 in which the supplemental instruction was offered. As demonstrated in the following chart, the number of grades in the 80 and 90% ranges increased, while the number of grades below 70% decreased after the inclusion of supplemental instruction, implying that the instruction proved beneficial. I caution that the figures could be deceptive as the tests might not be comparable in level of difficulty, or due to other influences such as increased student interest due to focus on supplemental instruction.

TEST PERCENTAGE SCORES



CHAPTER 5: CONCLUSION

When teaching a foreign language, I am teaching how to speak the language and also how to listen, read, write and identify cultural impact on comprehending the second language. Communication in a foreign language relies heavily upon the acquisition and embedding of vocabulary and grammatical concepts. My average teenage student is taking a second language due to a requirement, for graduation, college entrance, scholarships, or possibly the parents are pushing the foreign language because it is “important.” This type of requirement takes its own toll on student motivation. Besides that, there are many students that are struggling with the content. Often the students need to take the initiative to complete the practice; enough time that they understand the practice’s concept and can demonstrate it reliably. The amount of necessary practice is dependent on the student’s needs and strategies for learning. Lack of motivation combined with poor study habits lead to poor assessment scores and poor grades.

Research supports that multimedia instruction is motivational due to its ability to combine auditory, visual, and interactive instruction. Flow researchers have found that an optimal balance of skills and challenge of interactive activities leads the participant to explore, creating opportunities for intense concentration and processing to the point of automatic reaction. Clear task goals that are intrinsically interesting or authentic, feedback that one is successful, a sense of control, a lack of self-consciousness, and the perception that time passes more quickly impact flow experiences. Flow theorists claim that as a result of the intrinsic rewards associated with flow people push themselves to higher levels of performance. Flow apparently leads to more time on task which in turn leads to improvements in learner’s skills.

More intense focus and involvement that leads to improved performance on a task proves beneficial for the Spanish 2 curriculum which is challenging in the quantity of knowledge that must be retained and added to. Traditional instruction is satisfactory for many students but there is that group that need to review repeatedly and becoming bored with dictionaries, textbooks and one-on-one tutoring. This website that specifically addresses my Spanish 2 course content and the content from the previous year puts the needed information in one place and is accessible anytime and anywhere that a computer and Internet are available. By providing instruction for various learning styles and by supplying additional practice, students that need that extra bit of instruction can find exactly what they need in one specific place, in a specific format, using the exact vocabulary that is needed.

The multimedia website provides the incentive to make the extra attempts that traditional practice doesn't. It provides pictorial practice for long-term vocabulary retention. The audio clips provide the student with more exposure to authentic pronunciation and practice for accurate pronunciation which is often lacking in traditional instruction. Inclusion of cultural information needs to be further analyzed to determine if its use as motivation outweighs the distraction from the focus on the more unpopular grammatical aspects of language learning. Student evaluation and feedback suggest that the supplemental instruction has proven effective for some students. Further instruction and results should be evaluated for continuing development and use of website.

References

- Álvarez-Torres, M. J., Mishra, P., & Zhao Y. (2001). Judging a book by its cover! Cultural stereotyping of interactive media and its effect on the recall of text information. *Journal of Educational Multimedia and Hypermedia*, 10(2), 161-183.
- Camps, J.(2002). Aspectual distinctions in spanish as a foreign language: The early stages of oral production. *IRAL*, 40, 179-210. Retrieved Jan 24, 2006 from http://www.degruyter.de/journals/iral/iral40_3.html.
- Chun, D. M., & Plass, J. L. (1996). Effects of multimedia annotations on vocabulary acquisition. *The Modern Language*, 80(2), 183-198. Retrieved Jan 20, 2006 from hwwilsonweb database.
- Egbert, J. (2003). A study of flow theory in the foreign language classroom. *The Modern Language Journal*, 87(4), 499-518. Retrieved Jan 24, 2006 from hwwilsonweb database.
- Hede, A. (2002). An integrated model of multimedia effects on learning. *Journal of Educational Multimedia and Hypermedia*, 11(2), 177-191. Retrieved April 7, 2006 from <http://www.aace.org/dl/files/JEMH/JEMH112177.pdf>.
- Hill, B., & Slater, P. (1998). Network technology and language learning. *Education & Training*, 40(8), 374-379. Retrieved Jan 25, 2006 from proquest database.

- Jones, L. C., & Plass, J. L. (2002). Supporting listening comprehension and vocabulary acquisition in french with multimedia annotations. *The Modern Language Journal*, 86(4), 546-561. Retrieved Jan 24, 2006 from hwwilsonweb database.
- Nelson, W. A., Bueno, K. A., & Huffstutler S. (1999). If you build it, they will come, but how will they use it?. *Journal of Research on Computing in Education*, 32(2),270-286.
- Peled, A. (2000). Bringing the internet and multimedia revolution to the classroom. *Campus-Wide Information Systems*, 17 no. 1. Retrieved Jan 27, 2006, from <http://www.emerald-library.com>.
- Rosa, E. M., & Leow, R. P. (2004). Computerized task-based exposure, explicitness, type of feedback, and spanish L2 development. *The Modern Language Journal*, 88, 192-216. Retrieved Jan 24, 2006 from hwwilsonweb database.
- Seferoglu, G. (2005). Improving students' pronunciation through accent reduction software. *British Journal of Educational Technology*, 36(2), 303-316.
- Shook, D. J. (1998). Student investigations of cultural identity in the foreign language classroom. *Canadian Modern Language Review*, 54(2), 286-290. Retrieved on April 9, 2006 from <http://www.utpjournals.com/jour.ihtml?lp=product/cmlr/542/shook.html>.

Yeh, S. & Lehman, J. D. (2001). Effects of learner control and learning strategies on english as foreign language (EFL) learning from interactive hypermedia lessons. *Journal of Educational Multimedia and Hypermedia*, 10(2), 141-159. Retrieved Jan 25, 2006 from hwwilsonweb database.

APPENDIX A: SPANISH 2 NEEDS SURVEY

As you probably know, I am developing an initial unit of supplemental/remedial instruction for the Andover High School Spanish 2 course. I am requesting your completion of this survey to help me learn more about your technological capabilities and information on student needs and preferences. The information you and others provide will assist me in the continuing effort to provide better instruction so that students may improve their levels of learning.

Your answers will be handled in the strictest confidence. Your answers will be tabulated with those of others to determine preferred learning styles, information needs, usage patterns, content requirements, format preferences, and overall quality. Thank you for your time and assistance.

1. To help me evaluate your answers, please indicate by checking.....

• your computer experience.

- 1 year or less 5 to 9 years
 2 years 10 years or more
 3 to 4 years

• your computer usage.

- | | |
|---|---|
| <input type="checkbox"/> Word | <input type="checkbox"/> Macromedia Dreamweaver |
| <input type="checkbox"/> Excel | <input type="checkbox"/> Downloading music etc. |
| <input type="checkbox"/> PowerPoint | <input type="checkbox"/> Blackboard |
| <input type="checkbox"/> Publisher | <input type="checkbox"/> WebCT |
| <input type="checkbox"/> Correll | <input type="checkbox"/> Games |
| <input type="checkbox"/> Adobe | <input type="checkbox"/> Paint |
| <input type="checkbox"/> Search engines | <input type="checkbox"/> Internet |
| <input type="checkbox"/> Other (please specify) _____ | |

• your primary computer activity.

- homework
 games
 Internet
 socialization – Chat, email
 software applications
 Other (please specify) _____

2. When you receive new information for a HS class, what are your preferences for finding out/learning the information? Rate the following from 1 = "most preferred" to 8 = "least preferred. Leave blank any information sources that you do not use at all.

- | | |
|---|--|
| <input type="checkbox"/> Audio instruction | <input type="checkbox"/> Videos |
| <input type="checkbox"/> Printed/text instruction | <input type="checkbox"/> Demonstration |
| <input type="checkbox"/> On-line Tutorials | <input type="checkbox"/> Game format |

- Experiments/discovery Authentic communication (native speaker)
 Other (please specify)
-
-

3. Using the following scale, evaluate the usefulness of the following types of instruction:

- | Very Useful.....Not Useful | |
|---|---|
| 5 4 3 2 1 | |
| <input type="checkbox"/> Audio instruction | <input type="checkbox"/> Videos |
| <input type="checkbox"/> Visual/printed instruction | <input type="checkbox"/> Demonstration |
| <input type="checkbox"/> Interactive tutorials | <input type="checkbox"/> Game format |
| <input type="checkbox"/> Experiments/discovery | <input type="checkbox"/> Movement/drawing |
| <input type="checkbox"/> Music | <input type="checkbox"/> Tutoring |
| <input type="checkbox"/> Groups | |
| <input type="checkbox"/> Projects | <input type="checkbox"/> Other (please specify) |
-
-

4. Consider the types of instruction that you prefer. What makes them motivational/appealing to you?

5. Consider the types of instruction that you do not prefer. What makes them not valuable for you?

6. When your learning is being assessed for a HS class, what are your preferences for assessment? Rate the following from 1 = "most preferred" to 12 = "least preferred. Leave blank any information sources that you do not use at all.

- | | |
|--|--|
| <input type="checkbox"/> True/False | <input type="checkbox"/> Essay |
| <input type="checkbox"/> Multiple Choice | <input type="checkbox"/> Project |
| <input type="checkbox"/> Fill in the blank | <input type="checkbox"/> Presentation |
| <input type="checkbox"/> Matching | <input type="checkbox"/> Dialogue/speaking |
| <input type="checkbox"/> Game | <input type="checkbox"/> Short answer |
| <input type="checkbox"/> Computer | <input type="checkbox"/> Other (be specific) _____ |

7. What are the easy areas of learning Spanish?

8. What are the difficult areas of learning Spanish?

9. How would you improve Spanish instruction?

10. What other feedback would you like to provide me?