# Teaching \& Learning the Spanish Aspect Using Blogs and Wikis: An Exploratory Study 

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#### Abstract

This study investigated the influence of asynchronous computer text based technologies on the students' performance when learning the preterite and the imperfect aspects in Spanish. Two research questions guided the study: Research Question 1) Is there a difference in students' achievement levels in Spanish preterite and imperfect between those using wiki technologies and those using blog technologies after controlling for preintervention achievement levels? and Research Question 2) Are there differences in satisfaction levels for students learning Spanish preterite and imperfect via blog technologies as compared to those learning via wiki technologies? Results indicate that there were not significant differences between students who use blog or wiki technologies on performance levels when controlling for pre-existing knowledge. Results also indicated that there were not significant differences in satisfaction levels between those students using a wiki and those using a blog. These results suggest that wikis and blogs are good potential tools that may facilitate the teaching and learning of problematic grammar structures in a narrative context.


## INTRODUCTION

At present time foreign language instructors deal with students that are considered the first 'digital natives'. That is, they have grown up digitally literate and are usually involved in digital communicative practices. These students communicate with their peers in a way that is different from their parents. They also process information and learn differently than their teachers (Thorne \& Payne, 2005).

As students become more technologically literate and the technology itself becomes more accessible to schools and educators, it is important to explore the application of these new tools to find practical pedagogical solutions to language learning problems such as the learning of grammatical structures that differ from the learner's first language (L1) to their second language (L2). One of these major problematic structures to learn by native speakers of English is the preterite and imperfect aspects in Spanish (Frantzen, 1995).

The incorporation of text-based asynchronous technologies, such as blogs and wikis, into the foreign language classroom may facilitate this process by allowing the students to have active participation in their own learning process. Learners can self explore, reflect upon their learning, and work with their peers and teachers (Hitlz, 2005; Warschauer, 1997). The purpose of this exploratory study is to explore the potential application of blogs and wikis in the learning of the preterite and imperfect aspects in Spanish.

## Research Questions

The research questions that guided the study were:

1. Is there a difference in students' achievement levels in Spanish preterite and imperfect between those using wiki technologies and those using blog technologies after controlling for pre-intervention achievement levels?
2. Are there differences in satisfaction levels for students learning Spanish preterite and imperfect via blog technologies as compared to those learning via wiki technologies?

## Literature Review

## Blogs

Technically, a blog is a web application that displays serial entries with date and time stamps. Entries are typically presented in reverse chronological order, most recent first. They are often interlinked with other media such as voice messaging from a cell phone. (Thorne \& Payne, 2005; Golwin-Jones, 2003). Blogs are usually aimed at a broader audience than the blogger's own friends and family (McIntosh,
2005), or an unknown mass of 'netizens' (Williams \& Jacobs, 2004). A blog can be used as a journal or to reflect on a topic (Ducate \& Lomicka, 2005), for writing practice, or as free-form templates for personal expression. It can be used like a bulletin board for students to post messages, images and links related to classroom discussion topics. Learners could engage in research projects or create an online resource for others. In addition, they can be used for international classroom language exchange (Campbell, 2003). A blog can replace the standard web page allowing instructors to link internet items that relate to their course and can be used to organize in-class discussions. "Blogs are in their purest form, the core of what has come to be called personal publishing" (Downes, 2004, p.18)

Bloggers can benefit from reading what other people post and not necessarily post a contribution (Williams \& Jacobs, 2004). They can read what interests them such as their culture, their community and their ideas. They can engage with the content: criticizing, reflecting, questioning and reacting (Downes, 2004, p. 26). However, Blood (2000) believes that weblogs can transform both writers and readers from passive to participatory; and that by virtue of writing, the blogger will reflect upon his or her own thoughts and will create confidence in his/her own perspective. "Ideally, he will become less reflexive and more reflective, and find his own opinions and ideas worthy of serious consideration" (p. 6).

The chronological ordering of blog entries creates for each student an archive of their personal work that they can revisit and reflect upon (Thorne \& Payne, 2005). Learners can publish texts and graphics instantly to the web without sophisticated technical knowledge. They provide a perfect medium for digital fluency, in which people become comfortable using technology (Huffaker, 2005). They can be used as an electronic portfolio showing development over time. In addition, blogs can be multidisciplinary, and they can be applied to a variety of academic contexts (Golwin-Jones, 2003).

In second language (L2) learning, Thorne, Webber, and Bensinger (as cited in Thorne \& Payne, 2005) analyzed the blog entries of advanced placement Spanish foreign language high school students. They found that the participants' discourse presented academic and nonacademic features. Students were writing both to the instructors to fulfill a class requirement while also writing to and for one another. They also noted that students used new phrases, improved their spelling and the use of accent marks and verbal conjugations. Participants also indicated that they had a strong preference for blogging versus traditional journals or weekly essays.

In another study, Bloch (2007) analyzed the relationship between the blog of a Somali immigrant and the development of his academic writing. In this analysis, Bloch stated that the student progressed in the development of rhetorical strategies, however; there was less evidence that blogs helped with aspects of his writing such as grammatical control. Ducate and Lomicka (2005) applied a survey to fourth semester French and a second semester German university-level class. The report
revealed that students perceived they had improved their cultural knowledge and reading comprehension due to blogging.

Despite the benefits outlined above, potential bloggers might find some drawbacks when using a blog. For instance, blogs might require permission or server space, or could be banned by the administration of a school. In addition, blogs require constant feeding, nurturing and attention. They also may lack consistency in writing style and quality, as well as in quantity. Bloggers could write trivia in the blog content as well (Downes, 2004, p. 18). After all, the most engaging blogs, in real life, are those that have controversial content or those in which bloggers share their innermost thoughts (Grohol, 2002).

As stated before, blogs open the possibility to encourage the learners to read and write regularly, using a critical tone and this provides the beginning of metacognition and construction of knowledge. Creative writing could be enhanced if students record their ideas on a blog (McIntosh, 2005). As Bloch (2007) stated: "what problem do we have that blogging might be the solution for? rather than "what do we do with blogs?" In this particular study, blogs could be the solution to L2 learners' difficulty in acquiring the preterite and imperfect aspects in Spanish.

## Wikis

Wikis (Hawaiian for 'quick'), which are also extensively suitable for on-line group projects, are used as a shared repository of knowledge which grows over time. "Wikis are intensely collaborative. They feature a loosely structured set of pages, linked in multiple ways to each other and to Internet resources and an open-editing system in which anyone can edit any page. No knowledge of HTML is needed, and they use a simple set of formatting commands. The content is expected to have some degree of seriousness and permanence" (Bryant, 2006; Godwin-Jones, 2003).

Wiki technology is based on the idea of universal write/access. The students with the proper permissions- have the freedom to add, modify, or delete, the information in a wiki. The wiki page also contains a header showing the name of the page, a navigation menu, and some links that are specific to the displayed page. The most important of these links is the "edit this page," as clicking it will bring up the same page again, but instead of converting the page to HTML for display, it is enclosed as plain text in a big text area field in an HTML form with a "save" button underneath. The reader can edit the text and submit the new version, which will immediately replace the old version on the website. Clicking the "save" button submits the form data to the wiki script, which stores the new text as a new version of the same wiki page (Aronsson, 2002). Some wikis support tracking of wiki edits or updates. Tracking is useful for wiki administrators as it allows all wiki updates to be monitored and student participation to be assessed. Tracking is usually implemented as a "recent changes" page accessible from the wiki's homepage (Augar, Raitman \& Zhou, 2004). Wikis is a simple tool that requires a few minutes
of training and in some cases no additional installation is required on the client's side. Another advantage is the openness, as there are no restrictions or system constraints (Doebeli, 2005).

When it comes to the use of wikis to improve the learning process, students can develop their writing competence and improve their collaboration skills. For the instructor, the process of drafting and revising by learners can be monitored and supported easily (Sze, 2008). Students feel that wikis are easy to operate, pages download fast and modifications are quick to upload. Wikis also provide a relaxed environment where students can voice their opinion without any consequential repercussions (Raitman, Augar \& Zhou, 2005) "Wikis are in constant state of flux. Entries are often unpolished, and creators may deliberately leave gaps open hoping that somebody else will come along to fill them in .... Wikis discourage 'product oriented writing' while facilitating 'writing as a process'; and wikis ease students into writing for public consumption" (Lamb, 2004, p. 38-44).

There are also some concerns when adopting wikis. For instance, Raitman et al. reported that students pointed out that they perceived their postings were easily edited or deleted by the next participants. They also felt that they spent more time adding to the text, rather than negotiating meaning. Users might fear the use of destructive input in a wiki or the editing wars, which refers to the different opinions that people have. There is also the copyright issue because many people contribute to the authorship of a text (Aronsson, 2002). However, some of these issues can be dealt with by restricting access to some wiki pages and tracking participants’ postings. First versions of a page are recoverable and old drafts are always available (Thorne \& Payne, 2005).

Research about blogs and wikis in second language learning is still at its infancy stage. However, there are a number of research projects in progress. Blogs and wikis are tools that could be used to facilitate finding of a solution to problematic grammar structures such as the preterite and imperfect aspects. The nature and dynamics of the tool seem to facilitate the learners to polish or refine their work while at the same time reflecting upon their own learning process.

## The Preterite \& Imperfect Aspects

The grammatical terminology in most traditional language textbooks refer to the preterite and imperfect as tenses. However, Comrie (1976) established a distinction between 'tense' and 'aspect':

Tense relates the time of the situation referred to some other time, usually to the moment of speaking. In this sense, the most common tenses in most languages are present, past and future... aspect refers to the internal constituency of a situation.... the difference between he was reading and he

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read, is not one of tense, since in both cases we have absolute past tense.
(p.3)

The distinction between the preterite and imperfect aspects in Spanish is one of the most difficult to learn by English speakers. Part of this is because English does not indicate aspectual differences in the same way Spanish does (Frantzen, 1995). The preterite, or perfective aspect, is bounded (looking at the verbal activity from outside as having a beginning and an end) while the imperfect, or imperfective aspect, is unbounded (looking at the verb activity from the outside, without specifying a beginning or an end to the activity). (Potowski, 2005).

Ayllon, Smith \& Morillo, (1996) illustrate this distinction in the following example, which is in the simple past: he studied. This utterance is ambiguous with regards to the aspectual aspect. It could mean estudió or estudiaba, depending on the context in which the verb was used. For instance, He studied the lesson yesterday and he studied the lesson whenever he had the chance. The first requires estudió, the preterite, because it is seen as a completed action within a given past time, whereas the second one requires estudiaba, the imperfect, because it is shown as an ongoing action in the past. In short, the English simple past cannot signal aspect. However, it should be pointed out that the imperfective aspect is expressed in certain English forms such as the progressive he was studying and he used to study, which would be translated into the Spanish imperfect.

## Acquisition of Tense-Aspect Morphology

The acquisition of tense-aspect morphology has gotten the attention of many researchers in this area since the 1980s. Recent studies include learners with different language backgrounds and levels of education. Research in this field has been conducted taking into account two major hypotheses: the aspect hypothesis and the discourse hypothesis.

The aspect hypothesis maintains that the distribution of interlanguage verbal morphology is determined by lexical aspectual class. This hypotheses is based on a theory of lexical inherent aspect that refers to categories such as states (e.g., seem know, need, want and be), activities (e.g., sleep, snow, play and rain), accomplishments (e.g., build a house and paint a painting) and achievements (e.g., arrive, leave, notice and recognize) (Vendler, 1967). The discourse hypothesis maintains that the distribution of interlanguage verbal morphology is determined by narrative structure. Narrative discourse is composed of the foreground, which relates to the skeletal structure of the discourse, and the background which provides supportive material that elaborates or evaluates the events in the skeletal structure (Hopper, 1979.)

Some studies suggest that both hypotheses are needed in order to explain the distribution of verbal morphology in interlanguage. Bardovi-Harlig (1998) examined the influence of narrative structure or discourse and lexical aspect on the use of tense-aspect morphology. She found a hierarchy of influence on the pattern of inflection in learner language that reflects both inherent and lexical aspects (e.g., achievement verbs seem to be most likely to be inflected for past, regardless of grounding) and narrative structure (e.g., activity verbs in the foreground were inflected for simple past more often than activities in the background).

Lopez-Ortega (2000) found that perfective tenses (preterite) mark the foreground information and the imperfective tenses (imperfect) mark the background information. Also, there was a more frequent use of [ttelic] verbs (events such as arrive, leave, notice and fall asleep) with the preterite and [dynamic] verbs (such as seem, know, need, want and be) with the imperfect.

Liskin-Gasparro (2000) grouped the learners' influences on their selection of tense and aspect into four categories: the influence of the narrative task, lexical aspect, the role of the narrator in constructing discourse and the impact of instruction. In the narrative task category, the author found that 63 percent of the verbs were in the preterite when students retold a story. However, when the students told a personal narrative, 60 percent of the verbs were in the imperfect or background. In the influence of lexical aspect category, the author reported that the participants used rules that they had made for themselves. For instance, some respondents used the imperfect for state verbs, or they based their responses on auditory familiarity or what sounded correct. In the role of the narrator in constructing discourse category, the researcher reported that the narrators would retell the story according to their perspectives. For instance, a participant expressed that he would use the imperfect if he located himself within the story he was recounting. On the other hand, he would use the preterite if he had placed himself outside the situation. In the impact of instruction category, the participants attributed reasons for their morphological selections to classroom instruction in a direct or indirect way.

Similarly, Salaberry (1999) analyzed the potential role of lexical semantics in the selection of verbal morphology among instructed second language learners who had different levels of proficiency in the second language. He found that the preterite form of the verb was preferred by the lowest level learners (second and third semester) to express past time regardless of the lexical aspect of the verb. In addition, he discussed the fact that most movie plots are not only narrated in the past tense but also in the present tense, depending on how the participants interpret the task.

Ozete (1988) examined the notion of verbal focus and studied five variables that were associated in determining the choice of preterite and imperfect. He stated that high focus actions favor the preterite whereas low focus states or situations favor the imperfect. The first variable studied was the two Spanish verbs for the English verb
to be: ser and estar. The results showed that the verb to be: ser and estar attracted the imperfect more than the preterite. He also analyzed semantic features of the subject. He pointed out that common nouns receive low focus whereas proper nouns receive high focus. That is, common nouns are less explicit to their referents than proper nouns. He also found that the imperfect occurred in negation about two times as often as the preterite. In addition, the imperfect occurred about four times as often as the preterite in subordinate clauses whereas the preterite occurred about four times as often as the imperfect in the main clause.

For the purpose of this research study, the participants were expected to acquire the preterite and imperfect aspects through the discourse perspective of tense-aspect morphology. The instructor emphasized the use of the preterite for foreground events (or events that move the story forward) and the imperfect for background events (secondary ideas or details of the story) in narrative discourse.

## Methodology

## Variables

There were two dependent variables for this research: achievement and satisfaction level. The independent variables in this research included: text-based technology (blog and wiki technologies) and learner prior knowledge of the target structure (covariate.)

## Participants

The study was conducted in two classes with a total of 52 undergraduate students of intermediate Spanish 2 taught by one of the researchers at the Department of Foreign Languages in a major Mid-Atlantic University. There were originally 27 students in the blog group and 25 in the wiki group. Two students dropped from the wiki group before the study started. The course was taught in the traditional face-toface classroom using a communicative method of language teaching. The use of blogs and wikis was supplementary to the traditional classroom environment. The class was conducted according to the syllabus and policies of the foreign language department of this university.

## Instruments

A survey containing demographic items recorded information about the participants such as age, gender, first language, and reasons for taking the course, among others (see Appendix A) The pre- and post-test (see Appendix B) measured the students' learning performance with regards to the target structure (preterite and imperfect). This test had a recognition (reading) and production (written) component.

In the recognition component, the participants were provided with a text that described a famous fairy tale. The story was entirely in Spanish and each verb was inflected in the preterite and imperfect form. These verbs were in parentheses and the participants had to 'recognize' the appropriate form of the verb. For the production component, the participants were asked to write a fairy tale they were familiar with using the preterite and imperfect in narrative discourse (foreground vs background). Some of these fairy tales included The Three Little Pigs, Cinderella, and Pinocchio. The participants also had the option to write their own story. This test met the standards from ACTFL (American Council on the Teaching of Foreign Languages).This test was administered to each student individually by an instructor other than the researchers before and after the intervention.

In addition, a rubric was created in order to assess the participants' production component of the pre- and post-test instrument (see Appendix D). Before its validation, instructors assessed a sample paragraph, produced by a participant, using this rubric. Each instructor provided feedback about which items should be removed or modified. After validation, the researcher created a random list from which a pool of five students' pre- and post-tests were picked. The purpose of creating this random list was to examine rater bias and reliability. More specifically, the pool of tests was given to each instructor in order to assess the production component of the test. The researchers then processed the evaluations of each instructor in SPSS software in order to calculate the interrater reliability.

The fourth instrument was an attitudinal Survey (see Appendix C), which measured the students' satisfaction level of the intervention. The questions included items such as attitude towards the assignment, access to the hardware, user friendliness of the software and the perceived value of the activity. A Likert-based scale questionnaire was created by the researcher and was also validated by professionals in the field.

All instruments, except the demographic survey, were validated by professionals in the foreign language. The professionals' selection was based on their experiences as instructors of intermediate Spanish II (204) or of the intensive intermediate Spanish I and II combined (200) at the Department of Foreign Languages in the same university. The demographic survey, the pre-and-post test and attitudinal survey were administered by an instructor other than the researchers. The content validity of the instruments was conducted according to the guidelines suggested by Rubio, Ber-Weger, Tebb, and Rauch (2003). This was done in order to ensure that the wording of each item in the instruments was clear for the target population and if they were representative for data collection purposes. These researchers stated that "researchers may need to develop a new measure for a particular construct because no measure exists that operationalizes the construct as the researcher conceptualized it." (See Appendix E for validation of the pre-and post-test).

## Procedures

The study took place over a three week period. In terms of course content, this time frame corresponded to the time period of Chapters Three and Four of the textbook Punto y Aparte, for which the target structure was taught, as scheduled in the course calendar. Before data collection, Institutional Review Board (IRB) review took place.

The demographic survey and the pre-test were administered to both sections of Spanish 204 before target structure was taught. The first aimed to collect information about some characteristics of the sample population and the latter attempted to measure the students' previous knowledge of the preterite and imperfect aspects.

The target structure was taught in the traditional face-to-face environment. It should be pointed out that the participants had already been introduced to the use of the preterite and the imperfect aspects in previous Spanish courses (102 and 203). However, this was the first time they were exposed to these aspects in narrative discourse. The instructor emphasized the use of the preterite aspect to narrate the main events or foreground of the story and the imperfect to describe the details or background of the story. The metaphor of the flesh (imperfect) and the backbone (preterite) was also used to help participants differentiate this distinction.

Examples depicting the usage of the preterite and imperfect aspects in narration included a short passage from the students textbook as well as a personal experience the instructor presented in a Power Point presentation. The task of the participants was to read the passages and discriminate the main events (preterite) from the details of those events (the imperfect). After this activity, they started to write a chain story using the target structure. They had to write a story about a personal or imaginary experience. They first wrote the main events of the story (the preterite). They were instructed to leave a blank line after each sentence. After two or three minutes the instructor asked them to stop writing and to pass their story to their classmate on their immediate right so that more main events could be added. The participants repeated the same dynamics for about fifteen minutes. After that, they were asked to add details or secondary ideas to the story (the imperfect). This took another fifteen minutes and the new information was added in the blank lines they left during the first half of the activity. In the end, the participants were asked to get their copybooks back and some read aloud their stories for the whole class.

After this face-to-face activity, the participants were instructed to perform extra practice of the structure using a blog or a wiki. Before they were trained to use these tools, the instructor divided the blog group into seven small groups. Six groups had four participants and one had three. The wiki group was divided into six groups, from which five had four participants and one had three. The participants received a list with the names of each group members via e-mail. They were also assigned a
number within each group that indicated the order in which they would post their contributions. Each group had a leader or administrator who opened a master account and invited each member to join the blog or wiki via their e-mail accounts. Only the participants in each group could edit, add or modify the content of the blog or wiki. The participants had access to their accounts by using a personal password and identification number they created when they received the invitation to join the group from the administrator. The members of each group had mixed abilities in the second language. The instructor was a member of each group so that he could supervise and monitor the participants' work and their progress through the duration of the intervention.

Each group was given a series of specific written instructions about what to do during the intervention. These included specific instructions on how to create a wiki or blog account, description of the activity and a detailed schedule for posting their contributions. Constant reminders were sent by the instructor by e-mail. In addition, some time was allotted during the regular face-to-face class for each group to discuss about their progress and ask questions to the instructor about the activity. It is important to point out that face-to-face meetings were requested by the participants to clarify issues that could not be handled in the online environment, even though the blog has the comment function and the wiki the discussion function. These meetings helped to clarify doubts and to keep up to date some participants who fell behind with their postings. It seemed like these face-to face meetings encouraged students to make a commitment for their future postings and clarify things that were not possible in the online environment. The instructor noticed that after students had these small conferences in the face-to-face environment, the number of postings increased. Figure 1.1 describes the data collection timeline for this study.

Figure 1: Timeline for Data Collection


## Results

An analysis of covariance and a $t$-test were used to test the first and second hypothesis, respectively. For both of these, non-directional alternative hypotheses were utilized with the rejection criteria established at $\alpha=0.05$.

## Limitations

The extent to which this study's results are generalized to other populations is narrowed by several limitations. First, the study's low sample size results in lower statistical power, the probability of detecting statistical significance if it exists. As with any measure of achievement, students' scores are dependent on the subjective evaluations of foreign language educators. Students' attitudes are measured using a self-report instrument. Given the complexity and length of the curricular intervention employed, there are many confounding factors not addressed in this study that ultimately may impact students' achievement and attitudes. Ideally, this study would have included a third control group in which students utilized neither Wiki nor Blog technologies, but instead utilized traditional paper-based approaches. However, the curricular constraints of this study did not allow for such a comparison.

## Student Demographics

The study was conducted in two undergraduate intermediate Spanish II classes taught by one of the investigators in a Department of Foreign Languages in a major Mid-Atlantic university. Males comprise $40 \%(\mathrm{n}=18)$ of participants, and females comprise $60 \%(n=27)$. The average age for participants is between 21 and 22 years (mean=21.6, s.d.=1.9). Participants report majors in areas related to arts, sciences, education, psychology and others. Approximately two-thirds ( $\mathrm{n}=30,66.7 \%$ ) took Spanish as a requirement for non-foreign-language majors. All participants had taken at least one Spanish course previously, including courses taken in high school.

The results indicate the population used for this study is representative of other students who are enrolled in Spanish 204 in this university. Based on the instructor's subjective experience at this university, the sample is comparable in terms of first language, major, reasons for taking this course, the number of previous courses taken, their preference for working alone or in groups, their confidence learning the language and the amount of effort put into class.

## Student Achievement

Analysis of covariance reveals a significant linear relationship between students' pre-test scores and post-test scores ( $\mathrm{F}=35.74$; $\mathrm{df}=1 ; \mathrm{p}<0.000$ ). Roughly half (Adjusted $\mathrm{R}^{2}=0.495$ ) of the variance in post-test scores is accounted for by the variance in pre-test scores. When adjusting for this overlap in variance, no statistically significant difference is found when comparing students' scores among those utilizing wiki technologies and those utilizing blog technologies ( $\mathrm{F}=0.448$; $\mathrm{df}=1 ; \mathrm{p}=0.51$ ). This finding lends support to the particular type of technology utilized having no significant effect on student achievement. The sample size utilized results in a markedly low statistical power observed $(1-\beta=0.10)$.

## Table 1: ANCOVA Results

| Dependent Variable: Recognition and Production Post Scores Combined |  |  |  |  |  |
| :--- | :---: | ---: | :---: | ---: | ---: |
|  | Type III Sum <br> of Squares | df |  | Mean Square | F |
| Source | $1266.216^{\mathrm{a}}$ | 2 | 633.108 | 18.141 | Sig. |
| Corrected Mode | 114.381 | 1 | 114.381 | 3.277 | .000 |
| Intercept | 1247.219 | 1 | 1247.219 | 35.738 | .000 |
| Pre-Test Scores | 15.635 | 1 | 15.635 | .448 | .508 |
| Wiki vs. Blog | 1151.673 | 33 | 34.899 |  |  |
| Error | 34938.000 | 36 |  |  |  |
| Total | 2417.889 | 35 |  |  |  |
| Corrected Total |  |  |  |  |  |

a. R Squared $=.524($ Adjusted R Squared $=.495)$

## Student Attitudes

As illustrated in the table below, students using blog technology reported more favorable responses for 9 of the 11 attitudinal Likert scale items. Wiki users rated more favorably the two ordinal response items related to quality of feedback provided and received.

## Table 2: Attitudinal Variables

|  | Wiki |  | Blog |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Mean | Std. <br> Deviation | Std. <br> Mean |  |
| Deviation |  |  |  |  |
| This technology is easy to use. | 3.71 | .845 | 4.36 | .569 |
| The assignment (activity) was easy <br> to accomplish. | 3.52 | .873 | 3.96 | .841 |
| When working online, I felt <br> comfortable working with other <br> classmates. | 3.10 | 1.136 | 3.80 | .866 |
| I am satisfied with my <br> contributions (posts) to accomplish | 3.76 | .889 | 4.36 | .700 |
| I learned a lot from my classmates. | 3.00 | .949 | 3.12 | .726 |
| This activity helped me to <br> understand the use of the preterite <br> and imperfect aspects (tenses). | 3.29 | 1.102 | 3.72 | .980 |

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Table 2 continued...

| I am satisfied with the final content (story) of this activity. | 3.67 | 1.111 | 4.08 | . 812 |
| :---: | :---: | :---: | :---: | :---: |
| My writing skills have improved after this activity. | 3.19 | . 928 | 3.24 | . 879 |
| I provided sufficient feedback to my classmates. | 3.71 | . 784 | 3.40 | . 764 |
| I received enough feedback from my classmates. | 3.38 | . 865 | 3.24 | 1.012 |
| I was provided a reasonable amount of time to complete this activity. | 3.86 | 1.062 | 4.04 | . 735 |

A t-test for independent samples is used to test for differences in students’ attitudes towards the use of CMC in foreign language courses when comparing those utilizing wiki technologies with those utilizing blog technologies. The dependent variable, student attitude towards the use of blog and wikis in a foreign language course, is computed by summing responses to the 11 Likert Scale survey items (Appendix C). These items exhibit a good level of internal consistency (Cronbach's Alpha $=0.84$ ). Overall, attitudes are more favorable among students utilizing blog technologies (mean=41.32) than those utilizing wiki technologies (mean=38.19). More variation in scores exists among the wiki students (s.d.=7.32) than blog students (s.d. $=4.79$ ).

Table 3: Total Attitudinal Variables for Blogs\& Wikis

| Was Wiki or Blog Used? | N |  | Mean |
| :--- | :--- | :--- | ---: | Std. Deviation | Wiki | 21 | 38.1905 | 7.31860 |
| :--- | :--- | :--- | :--- |
| Blog | 25 | 41.3200 | 4.79340 |

Levene's test for equality of variances yields a statistically insignificant result ( $\mathrm{F}=2.30 ; \mathrm{p}=.136$ ), thus failing to reject the null hypothesis that no statistically significant difference exists among variances, and lending support to the assumption of homogeneity of variance. A subsequent t-test reveals no statistically significant difference when comparing students' attitudes among those who utilized wiki technologies with those who utilized blog technologies $(\mathrm{t}=-1.74 ; \mathrm{df}=44 ; \mathrm{p}=0.089)$. This result lends support to the notion that wiki and blog technologies do not differ significantly on their impact upon students' attitudes towards the use of CMC in a foreign language course. The sample size utilized in comparing attitudes results in a low level of observed statistical power $(1-\beta=0.40)$.

## DISCUSSION

## Student Achievement

The use of either wiki or blogs influences little student achievement. The predictive model involving students' pre- and post-scores suggests that a large part (Adjusted $\mathrm{R}^{2}=0.495$ ) of a student's likelihood of performing well is based on the achievement level with which they approach instruction. Analysis of Covariance, however, fails to detect a significant difference when comparing students in the blog class with those in the wiki class.

In this study, achievement scores reflect two components: 1) Written Production, and; 2) Reading Recognition. These scores were summed to compute an overall score. When conducting separate ANCOVAS on each of the subscores, non significant findings are obtained for both subscores involving Production ( $\mathrm{F}=3.26$, $\mathrm{df}=1, \mathrm{p}=0.572$ ) and Recognition $(\mathrm{F}=2.817 ; \mathrm{df}=1 ; \mathrm{p}=0.101$ ). However, whereas a significant predictive model is obtained between pre- and post-scores for written Production ( $\mathrm{F}=31.26 ; \mathrm{p}<0.000$ ), no predictive model arises for pre and post Reading Recognition scores ( $\mathrm{F}=2.26 ; \mathrm{p}=0.141$ ). These results suggest that students' skills in Recognition may be more sensitive to instruction and other interventions as compared to students' skills in Production, which are largely determined by their initial Production abilities. Future studies may bifurcate these subscore constructs and examine each in more detail.

## Student Attitudes

Although this study ultimately yields non significant findings for the $t$-test involving student attitudes, future research should replicate this study with a larger sample. The $p$ value obtained, although not statistically significant, is not much greater than the $\alpha=0.05$ cutoff. Had a greater observed power been obtained through a larger sample size, this study may have detected a difference in attitudes when comparing the two groups. Of further interest are the more favorable attitudes among students utilizing blogs as opposed to wikis. Future research can examine why students may prefer blogs to wikis, and the implications for curricular design in foreign language courses.

## Conclusion

This study investigated the influence of blog and wiki technologies on the learning of the preterite and imperfect aspects in Spanish. Results in this research study support the idea that blogs are as effective as the wikis to help students learn the target structure from the discourse perspective.

In this sense, both technologies can potentially facilitate interaction between teacher-students or student-student outside the traditional classroom. This may be an advantage over other traditional technologies such as a word document or paper and pencil. In addition, instructors can assign tasks that elicit difficult grammar structures and at the same time provide feedback to the students. These platforms also facilitate the students to learn from their peers when they work together on a project. This is of crucial importance because classroom time at this level is mostly used for communicative activities than written activities.

When it comes to satisfaction levels, the students did not have any preference between blogs and wikis with regards to: the use of technology, the task assigned, the level of comfort working with other classmates, contributions (postings), the understanding of the grammar, improving their writing skills, or feedback provided or received. These results support the idea that both technologies can be easy to operate (Reitman, Augart \& Zhou, 2005), and have the potential to foster and support writing as a process (Goldwin-Jones, 2003; Lamb, 2004).

In addition, the nature and interface differences of the technology did not seem to have a major effect on the participants' achievement scores and attitudes. For instance, blogs are described as fostering individual or personal work (Bloch, 2007; Downes, 2004; Ducate \& Comcka, 2005; Thorne \& Payne, 2005). On the other hand, wikis are described as fostering on-line group projects or collaborative activities (Aronsson, 2002, Dobeli, 2005; Bryant, 2006; Godwin-Jones, 2003; Sze, 2008). A blog differs from a wiki in that it shows each post in reverse chronological order whereas the wiki shows a blank page that can be edited by the participants as necessary. However, in this study the participants in the blog and the wiki group were assigned to produce a story per group working collaboratively. The results suggest that both platforms can be perfectly used for collaborative projects. Nonetheless, a further study may explain why bloggers had a more favorable attitude to this activity, even though wiki users used an interface that in theory would facilitate better this writing activity.

We can conclude that these tools are a potential solution for instructors who want to deal with the teaching and learning of problematic grammar structures, especially written narrations, such as the preterite and imperfect aspects without sacrificing valuable classroom time.

A mixed-methods study would be the continuation of this research study. The addition of qualitative data could enrich the present research study because it would allow further insight into the students' processes of learning the structure as well as their interaction with the technology. The inclusion of a control group (e.g., traditional paper-based or word processing software) should be included to compare language gains and attitudes of this specific grammar structure between students who use technological mediated pedagogies vs. traditional instructional methods. In addition, the study should be conducted with a larger sample size so that the results
can be generalized. Furthermore, a variety of student populations should be included to better encompass the variety of undergraduate language learners

Future studies should incorporate in the intervention activities with more visual aids such as pictures or video clips embedded in these technologies. It might better facilitate the task of the students' rewriting of the story than retrieving it from their memory. In addition, a comparative research study should be conducted according to the students' preferences. That is, future studies should divide the groups into those who prefer to work alone and those who prefer to work in groups. Also, additional data needs to be collected related to the time the participants spent on the system, time taken to perform the assignment, quality of postings and amount of feedback provided (or received from their peers). Further research should also be done with other emerging web 2.0 technologies.

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## Appendix A

## Demographic Survey

1. Date of birth:
2. Gender: O Male O Female
3. First language: $\qquad$
4. Major:
5. Reason for taking this course (Please, choose one)

O Requirement
O Major
O Minor
O Personal interest
O ther (please, specify) $\qquad$
6. How do you consider your motivation for this course? (Please, choose one) O High

O Medium
O Low
7. How many Spanish courses have you taken before? (include courses taken at high school)
8. Did you take Spanish 101, 102, and 203 at WVU? O Yes O No
9. Have you ever taken a placement test? O Yes O No
10. If so, specify the level that you placed into.
11. Do you prefer to work alone or in groups? $\qquad$
12. What is your confidence learning the language?

O a lot
O a little
O some
O None
13. How much effort are you putting into this course? (please, choose one) O More than in other courses

O About the same as in other courses
O Less than in other courses
Adapted from: María Isabel Charle Poza, 2005.

## Appendix B

## Preterit vs. Imperfect Test (part I)

1. Read the following story in past tense and choose the verb in parenthesis that best corresponds to the story. Please circle the verb that you think best fits the sentence.

Ricitos de Oro y los tres osos (Goldilocks and the Three Bears)
(1.Hubo , Había) una vez tres osos que (2. vivieron, vivían) en el bosque: Papá Oso, Mamá Osa, y Bebé Oso. Un día Mamá Osa (3. hizo , hacía) una sopa de arroz con pollo y (4. puso, ponía) tres platos en la mesa. Los osos (5. se sentaron, se sentaban) para comer porque (6. tuvieron, tenían) muchísima hambre. Ellos (7. quisieron, querían) comer la sopa pero no (8. pudieron, podían) porque (9. estuvo, estaba) tan caliente. Ellos (10. decidieron , decidían) dar un paseo. (11. Fue , Era) un día bonito del verano y (12. hizo, hacía) sol.

Los osos (13. se divirtieron, se divertían) cuando una niña perdida (14. llegó, llegaba) a la casa. (15. Se llamó, Se llamaba) Ricitos de Oro y (16. fue, era) una chica curiosa. Ella siempre (17. jugó, jugaba) cerca de su casa pero ese día (18. se perdió, se perdía) en el bosque. Ricitos de Oro (19. se acercó, se acercaba) a la casa y (20. entró, entraba) en ella. Luego ( 21 . se comió, se comía) toda la sopa del plato pequeño porque ( 22 . estuvo, estaba) perfecta - ni demasiado caliente ni fría. Poco después, los tres osos...

Total $\qquad$ /22

Adapted from Barbara Kuczun Nelson from :
Source: http://www.colby.edu/~bknelson/exercises/ricitos1.html. Retrieved on 08/22/06

## Preterit vs. Imperfect Test (part II)

2. Write a small segment of one of the following stories or about a story that you know best. Please, complete the lines assigned.

Narración en el pasado: Narre un pequeño segmento de una de las historias a continuación o de alguna que Ud. Mejor conozca.

1. Los tres cerditos (the three little pigs) 2. Blanca nieves (Snow White)
2. La caperucita Roja (Little Red Riding Hood)
3. La cenicienta (Cindirella)
4. Pinocho (Pinocchio)
6.Tu historia preferida (your Favorite story)
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

## Appendix C

Attitudinal Survey

| Please indicate your level of agreement with each of the <br> following items by circling the appropriate number |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |

## APPENDIX D

## Preterite \& Imperfect Rubric

| Categories | 5 | 4 | 3 | 2 | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Mechanics | Very few errors in conjugations | Few errors in conjugations | Some errors in conjugations | Frequent errors in conjugations | Numerous errors in conjugations |
| Preterite usage | The student uses the preterite to narrate main events consistently | The student uses the preterite to narrate main events most of the time. | The student uses the preterite to narrate main events sometimes | The student rarely uses the preterite to narrate main events . | The student almost never uses preterite |
| Imperfect Usage | The student uses the imperfect to narrate background events consistently | The student uses the imperfect to narrate background events most of the time | The student uses the imperfect to narrate background events sometimes | The student rarely uses the imperfect to narrate background events | The student almost never ises the imperfect |
| Content | Ideas well developed and well organized | Ideas moderately well developed and organized | Ideas adequately developed and organized | Ideas partially developed and organized | Inadequate development and organization of ideas |
| Vocabulary usage | Rich use of appropriate vocabulary | adequate use of appropriate vocabulary | Some appropriate vocabulary | Minimal use of appropriate vocabulary | Very limited use of appropriate vocabulary. |
| Total Points earned |  |  |  |  |  |

