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Technology-mediated TBLT in a Hybrid Environment: Bridging Content and Language Production

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Abstract
This article examines the use of technology-mediated, task-based language teaching (TBLT) in a hybrid environment as an instructional approach in an intermediate-level Spanish course. It (a) evaluates elements of a hybrid course that was developed with computer-assisted language learning (CALL) materials to help learners improve their Spanish, focusing on two areas of specialization––engineering and business; (b) examines the effectiveness of the course materials and curriculum with a focus on CALL readings; (c) demonstrates that the technology-mediated TBLT approach in the hybrid learning environment was successful in linking content and language; and (d) establishes that the learners' speaking skills had improved over the course with a computerized oral assessment. Language assessment results indicate that the technology-mediated TBLT program not only had an impact on intermediate Spanish learners' speaking skills, but also prepared learners to perform tasks in both the target language and their fields of interest (i.e., business and engineering). The results contribute to the research of the effectiveness of technology-mediated TBLT.

Keywords
hybrid, technology-mediated TBLT, content-based, CALL readings, language assessment

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This article examines the use of technology-mediated, task-based language teaching (TBLT) in a hybrid environment as an instructional approach in an intermediate-level Spanish course. It (a) evaluates elements of a hybrid course that was developed with computer-assisted language learning (CALL) materials to help learners improve their Spanish, focusing on two areas of specialization—engineering and business; (b) examines the effectiveness of the course materials and curriculum with a focus on CALL readings; (c) demonstrates that the technology-mediated TBLT approach in the hybrid learning environment was successful in linking content and language; and (d) establishes that the learners' speaking skills had improved over the course with a computerized oral assessment. Language assessment results indicate that the technology-mediated TBLT program not only had an impact on intermediate Spanish learners' speaking skills, but also prepared learners to perform tasks in both the target language and their fields of interest (i.e., business and engineering). The results contribute to the research of the effectiveness of technology-mediated TBLT.

Keywords: *hybrid; technology-mediated TBLT; content-based; CALL readings; language assessment*

In comparison to the traditional face-to-face classroom, today more foreign language classes are offered in online, hybrid, and flipped formats that require students to use technology to complete language tasks. Some examples of how technology and tasks are interconnected include the following: (a) computer-assisted language learning (CALL) readings as a core-task including pre-and-post reading tasks; (b) speaking or writing tasks, such as a conversation or online chat with a native speaker by means of synchronous computer-mediated

communication (CMC); (c) speaking and writing tasks, such as leaving a message on an answering machine or writing a report on how to operate a machine by means of asynchronous tool that does not occur in real time; and (d) online sessions in a virtual environment with the teacher and other learners that occur in real time. As González-Lloret and Ortega point out (2014), "language educators are increasingly interested in welcoming into their teaching current Web 2.0 technologies" (p.2).

In technology-mediated, task-based language teaching (TBLT), tasks must be well designed, used, and evaluated in an approach that suits various language teaching formats and technologies. González-Lloret and Ortega (2014) also mention that technology-mediated TBLT helps systematize the technological designs of tasks. If the integration of technology and tasks is well driven by the technology-mediated TBLT framework, supported by Second Language Acquisition (SLA) theories, language learning tasks "can help minimize students' fear of failure, embarrassment, or losing face; they can raise students' motivation to take risks and be creative while using language to make meaning…" (p.4).

CALL research has investigated the effectiveness of TBLT (Ziegler, 2016) and tasks for language learning (Thomas, Reinders, & Warschauer, 2013), but there is a dearth of studies that investigate the synergies between TBLT and CALL (González-Lloret & Ortega, 2014). More research in the modern classroom setting with different teaching formats is needed to shed light on more innovative implementations of TBLT and CALL. In this study, technology-mediated TBLT and CALL materials were adopted for a Spanish hybrid course that prepares students for professional, real-world communication in the target language. The hybrid format in this case included both traditional face-to-face classroom time and CALL tasks for students—individually and in small groups—via *Second Life.*[1]

The Spanish hybrid intermediate course for undergraduate students at Iowa State University was developed after the type of language that students needed to focus on was identified. A needs analysis informed the director of the Spanish language program that these second language (L2) learners needed to be able to perform tasks in two areas of specialization: engineering and business. In accordance with student needs, tasks were designed based on four features from the technology-mediated TBLT approach—focusing on 1) meaning, 2) goal orientation, 3) holism, and 4) learner-centeredness. The course provided examples of the effectiveness of CALL readings, illustrated the success of the technology-mediated TBLT approach in the hybrid environment for linking content and language, and showed, through the results from a computerized oral assessment, that students overall spoken skills had improved.

The evaluation of the Spanish hybrid intermediate course was guided by two questions:

1) What types of language and content features from the CALL readings did the learners acquire?
2) Within the hybrid environment, what was the L2 learners' overall Spanish skill as measured by the *Versant*[2] *Spanish Test*?

LITERATURE REVIEW

Task-based language teaching is an approach to second and foreign language education with a task as its main component of the learning process. The focus of the task is to create meaning with a clear outcome and promotes authentic language use (García Mayo, 2015). The idea of TBLT is to carry out tasks in L2 that native speakers would do in real-life situations (Long, 2015; Van den Branden, 2016). In addition, Norris (2009) states that TBLT is an approach in L2 instruction "that integrates theoretical and empirical foundations for good pedagogy" (p. 578) with tasks that allow learners to use the language in a meaningful way. The ideas underlying the approach are built on educational philosophies; the SLA theories, such as the output hypothesis and the cognitive approach from the psycholinguistic perspective; and the empirical findings on effective instructional techniques. Reviewing the origins of TBLT, Norris (2009) explains that in Dewey's (1933) book, the concept of "experimental learning" (p.579) or learning by doing was already adopted. Since then, emphasis has been placed on the significance of learners' motivation, which promotes their involvement in the instructional content and use of knowledge and skills outside classroom.

Tasks as the Foundation of TBLT

There are multiple definitions of *task* (Bygate, 2016), but for this study the working definition of *task* by González-Lloret and Ortega (2014) is used. Their definition, in accordance with the context of technology-and-task integration, integrates definitions by Nunan (2004), Skehan (2003), and Willis and Willis (2007) from a pedagogical perspective. Nunan (2004) defines a task as "a piece of classroom work that involves learners in comprehending, manipulating, producing or interacting in the target language while their attention is focused on mobilizing their grammatical knowledge in order to express meaning, and in which the intention is to convey meaning rather than to manipulate form" (p.4). The basic definition of task by Willis and Willis (2007) is a problem presented to a student for which he or she needs to find a solution relevant to a real-world situation. Bridging content with language production starts with the identification of tasks. As Willis and Willis (2007) propose, the vocabulary focus in a lesson is a good starting point for the definition and identification of tasks, but the instructor needs to also examine the particular task in which this vocabulary can be put into practice. That is, the instructor should design tasks to promote authentic language use, giving learners the freedom to control the language use rather than the language being decided by the teachers (Willis & Willis, 2007). Skehan (2003) adds to the definition of task, stating that meaning is crucial and the outcome is measurable.

González-Lloret and Ortega (2014), bringing together these explanations of task, define task by following the five key principles drawn from SLA research:

1) *primary focus on meaning*: language focus should be implicit; 2) *goal orientation*: tasks must have a communicative purpose and outcomes resulting from task completion; 3) *learner-centeredness*: tasks should include learners' needs and wants, so a needs analysis is necessary; 4) *holism*: tasks need to reflect authentic language use; and 5) *reflective learning*: tasks should raise learners' awareness of the usage of the language.

Learners can be successful in acquiring oral output (Nielson, 2014), grammatical accuracy (González-Lloret & Nielson, 2014), and vocabulary (Chacón, 2012), depending on how tasks are designed. When designing tasks, Nunan (2004) states that the focus on form in TBLT is controversial. Advocates of focusing on form consider manipulation of language forms necessary to complete the task (Norris, 2009; Nunan 2004). In other words, one must focus on accuracy in addition to meaning and communication. Arguably, researchers posit that it is better to have a meaningful task with a clear outcome without eliciting a particular grammatical structure. Learners will be successful in completing the task when they are exposed to the target language and there are no linguistic constraints (Krashen, 1985). Skehan (2003) contends that mastery of linguistic knowledge is required before learners are able to use L2. We agree with advocates of integrating focus on form and meaning in learning tasks because research has found it is more effective for achieving L2 accuracy. Furthermore, form and meaning are two aspects necessary for language learning and acquisition (Choi & Kilpatrick, 2013-2014).

Technology-mediated TBLT

In the technology-mediated TBLT framework proposed by González-Lloret and Ortega, technology is integrated in tasks. The framework includes three requirements: 1) a clear definition of task as presented in the previous section describing the five features of a task to guide the design of the task and the selection of technology; 2) implications of integrating technology in L2 educational settings; and 3) integration of tasks and technology in the L2 curriculum.

Regarding the first requirement, Wang (2014), focusing on meaning, designed tasks in *Second Life* using English as a foreign language to foster communicative skills. Wang's results indicated that learners needed to be trained to use technology for task completion. Nielson (2014) emphasized learner-centeredness by carrying out a needs analysis for an online task-based Chinese course before designing the tasks. Learners used asynchronous written communication and synchronous role-plays, and the results indicated improvement in speaking proficiency as a result of the course. Stockwell (2010) focused on linguistic outcomes through goal orientation. Learners used asynchronous CMC to prepare class presentations and produced complex sentences as they had time planning and preparing for the task. Learners also used synchronous CMC to write a paper, producing accurate shorter sentences. These studies showed using tasks with one or two features proposed by González-Lloret

and Ortega (2014), whereas research is lacking in using tasks that rely on three or more of the five features.

The second requirement is to examine the technological implications of TBLT. Teaching language with technology globally requires students and teachers to learn in different ways (González-Lloret, 2016). González-Lloret and Ortega (2014) see technology as "not just a vehicle of instruction or delivery, but instead spearheads a set of new demands and actions which in and of themselves become target tasks and hence part of the curriculum" (p.7). Nielson (2014), Stockwell (2010), and Wang (2014) have implemented technology in TBLT and have empirically assessed the effectiveness of TBLT. Their studies indicated that some tools influenced implementing authentic tasks and improving specific skills. As there is a dearth of studies that present the implications of technology integration in tasks (Ziegler, 2016), González-Lloret (2016) calls for more research about technology-based L2 tasks.

The third requirement, according to González-Lloret (2016), is the relationships of technology and tasks in curriculum. Technology affects the design, implementation, and assessment of the curriculum (González-Lloret, 2016; Nielson, 2014). That is why the use of the technology-mediated guidelines proposed by González-Lloret and Ortega, (2014) is relevant.

THE SPANISH HYBRID COURSE

Needs Analysis and Materials Development

Whereas the Spanish language program at Iowa State University focuses on humanities, science and engineering play a central role in the general curriculum of the university. We began the design of the hybrid course with a needs analysis, as in developing and implementing a TBLT curriculum, analysis of learners' needs, goals, and occupational demands helps identify the learning outcomes to be reached in a course (Norris, 2009).

Students enrolled in the Language and Cultures for the Professions Program completed a survey about the content they were interested in when learning Spanish. Responses identified five areas of interest: engineering, business, agriculture, criminal justice, and biology. Engineering and business, which were requested most, were selected as course content. CALL reading materials with multimedia glosses, pre-and-post speaking and writing tasks, self-correcting and other exercises were created, using authentic materials (i.e., texts written by and for native speakers). In addition, readings in humanities were also incorporated, using the texts and glosses from the course textbook, *Interacciones*, by Emily Spinelli, Carmen García, and Carol Galvin Flood (2008). CALL readings and tasks were developed to supplement textbook readings. Even though CALL readings in humanities were part of the course, this paper does not include them. Instead, the paper focuses on the CALL readings and tasks on the domains of business and engineering, which were added to the course at the request of the students.

Materials for two semesters were created. The first semester included the first six chapters from *Interacciones*. The second semester included the remaining chapters (7-12). For the first six chapters in the first semester, twelve CALL readings in humanities with corresponding speaking tasks were developed. For the second semester, six CALL readings on business with corresponding speaking tasks and six CALL readings on engineering with corresponding speaking tasks were developed. The content of the readings was thematically aligned with that in the textbook. For example, Chapter 7 of the textbook was about the history, use, popularity, and market of the *guayabera*, a piece of clothing that men from Latin American countries wear. The reading in business focused on agreements for commercial exchanges between Panama and Cuba, including import and export products such as *guayabera* from Panama to Cuba. Meanwhile, the reading in engineering focused on the process for making saddlebags with the fabric of a beach umbrella. The reading provided special instructions and descriptions of the technical characteristics of the tools used, similar to those that one could find in an engineering textbook.

A technology-mediated TBLT approach was adopted in course design to enhance students' language experience. Students were provided with content that is in alignment with the linguistic demands of their professions. The adoption of authentic texts was crucial as the input presented in the text corresponded to real-world tasks, such as an engineer who is required to explain the technical characteristics of a piece of new equipment (see Appendix A for sample tasks).

Instructional Delivery

In addition to the traditional classroom setting that included all students, the class was divided into small groups (4-5 students) for online sessions, which allowed students to have a semi-private lesson and the chance to interact more with the instructor and other students. The instructor spent 200 minutes interacting with students as s/he would do in a face-to-face classroom, but students had 125 minutes a week working with the instructor and classmates. The instructor met students four times a week: two days in classroom with the entire class for 50 minutes (50 min. x 2 days =100 min.) and two days online with four small groups (25 minutes x 4 groups=100 min.). During the face-to-face meetings students worked with the textbook (see Table 1).

Table 1
Hybrid Course Design for Meetings

	Face-to-face meetings	*Second Life online meetings*	*Total time*
Instructors	2 days = 100 min.	2 days = 100 min.	200 min.
Students	2 days = 100 min.	1 day = 25 min.	125 min.

Technology

WebCT was the Learning Management System used to manage the course and provide materials for students. Video tutorials informed students about the CALL readings, tasks, and the hybrid mode of delivery. The tools integrated in WebCT included: (1) *Wimba* for students to produce asynchronous speaking output by recording themselves when responding to a specific task in engineering and business. One of the benefits of using *Wimba* was that it allowed students to receive more input from other students so that they could see how others completed the task. Furthermore, students had more time preparing for language production to improve accuracy; (2) *Second Life* for instructors to interact with learners, correct tasks, and provide feedback; for students to do role-play tasks and interact in real time with a Spanish native speaker; (3) A computer lab where proctored examinations of listening, grammar, vocabulary, writing, and self-assessments were conducted; and (4) CALL readings with multimedia glosses, pre- and post-reading tasks for texts in the humanities and speaking tasks in business and engineering, which we called *Un Paso Más* (UPM) [*A Step Further*]. The instructional aids in the CALL materials promoted learner independence when they interacted with a text. To facilitate reading comprehension and the acquisition of linguistic knowledge, multimedia glosses with lexical and grammatical explanations, in picture or in video, were integrated into the readings, which assisted students to master the meaning, pronunciation, synonyms of the words. Figure 1 shows the linguistic expression *se lleve a cabo* [*carried out*] in a business reading, which students used to complete a UPM oral task. Lexical knowledge is an important component of language proficiency. Numerous empirical studies have shown that there is a "relationship between vocabulary knowledge and language reception and production" (Beglar & Nation, 2014, p.1). Moreover, having a large vocabulary is necessary to speak efficiently and "a key factor underlying speaking proficiency" (Beglar & Nation, 2014, p.5).

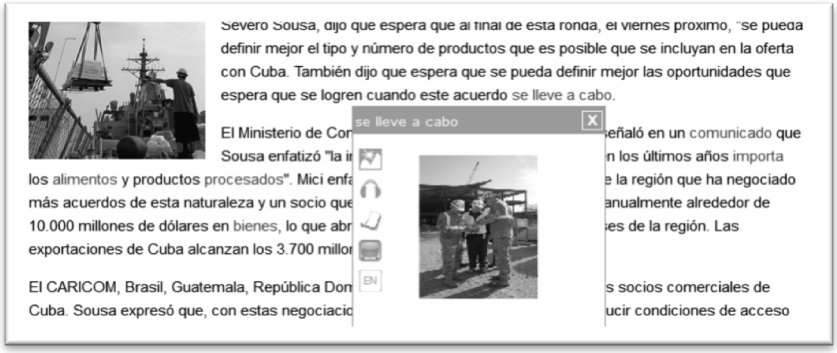

Figure 1.
Gloss Interface in the Business Reading Material

Task Design

Twelve speaking tasks on business and engineering were designed, guided by the four features recommended by González-Lloret and Ortega (2014):

(1) *Focus on meaning*: While working with a task, "learners [were] able to use any linguistic resources at their disposal in order to complete the task" (Nunan, 2004, p.94). For example, learners in this study had a textbook lesson focusing on the grammar features of past perfect and perfect conditional and then they worked on an oral UPM task corresponding to the content in a CALL reading. The task did not include directions of using a particular structure (past perfect or perfect conditional). When designing the task, however, we integrated meaning and form of some linguistic units (Chapelle, 2003; Nunan, 2004; Willis & Willis, 2007; Van den Branden, 2016), provided comprehensible and salient input (Krashen, 1985; Chapelle, 1998), and required comprehensible output from students (Swain, 1985), as these are necessary for second language development (Long & Robinson, 1998, Choi & Kilpatrick, 2013-2014). As González-Lloret (2016) noted, the TBLT's main goal is "language acquisition and not just communicative effectiveness" (p.3). We gave students the chance to think about language when completing a task. The course materials (the textbook, CALL readings, and other resources) allowed students to focus on form if they wanted to manipulate and practice language form (e.g., identifying phrases and specific words) and practice technical vocabulary. Students "decide what to focus on and why" (Willis & Willis, 2007, p.132).

(2) *Goal orientation*: The tasks included learning outcomes based on the "can do" statements at the intermediate level from the *Common European Framework of Reference for Languages: Learning, teaching, assessment* (CEFR) (Council of Europe, 2001). According to Willis and Willis (2007), "can do" statements can be seen as learning outcomes that learners should be able to achieve as a result of completing a task or a course. The outcomes of the tasks were measured against the "can do" statements (see Appendix A), namely, the amount and quality of information, language accuracy, fluency, vocabulary use, and comprehensibility. When evaluating the UPM task outcomes, the use of target forms (in terms of frequency) was also observed.

(3) *Learner-centeredness*: As mentioned previously, the course was designed based on learner needs. Tasks were designed to engage students by providing content relevant to their interest and opportunities for them to use the language. Willis and Willis (2007) point out that time for planning before language production is imperative. In the UPM tasks, learners were not under time pressure for immediate production.

(4) *Holism*: Tasks were created to simulate real life professional demands in the content areas. The authenticity of tasks came from the content of the authentic CALL readings. The design of the tasks focused on meaning, the overall outcome, not on mastery of a particular linguistic form. The tasks resembled what professionals would do in a real-life context.

The Process of Completing Tasks

The task consisted of four steps: 1) responding to open-ended pre-reading questions to predict the theme; 2) reading the CALL text; 3) completing the post-reading questions via an online quiz based on reading comprehension and vocabulary; and 4) completing a UPM task either through writing or speaking (see Figures 2 and 3). Learners were given the choice of selecting one field—engineering or business—and switching fields from chapter to chapter.

Figure 2
Interface for Tasks within the Engineering Theme

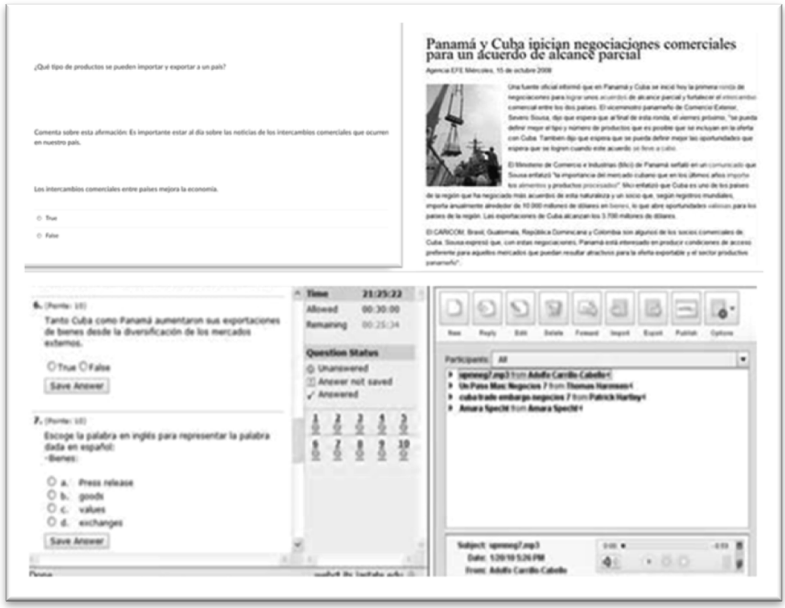

Figure 3
Process of Completing Tasks: 1) "Antes de leer," Survey; 2) Chapter 7, Business Reading; 3) Online Quiz, "Después de leer"; and 4) Speaking UPM Task UPM through Wimba

METHODOLOGY

Participants

Thirty-seven participants were recruited from two sections (20 in one and 17 in the other section) of a hybrid Intermediate Spanish 202 course. Among the participants, 26 were female and 11 were male. English was their native language. Participants' ages ranged from 18 to 22, and the average age was 20. After being informed of the purpose of the study, participants agreed to participate voluntarily and signed a consent form before data was collected. The Iowa State University Institutional Review Board approved the study.

Data Collection and Analysis

The measurement of participants' L2 achievement, as mentioned in the task design and definition section, was based on the "can do" statements at the intermediate level from the *Common European Framework* (Council of Europe, 2001). The frequency of linguistic units (i.e., vocabulary from one CALL reading in business and engineering) was collected from two spoken tasks (see appendix A) that students completed out of class. The first task focused on business corresponding to Chapter 7 of the textbook; the second focused on engineering corresponding to Chapter 12 of the textbook. These two tasks were selected for two reasons: a) being the first and the last task in the semester which coincided with data collected on their spoken proficiency through the *Versant Spanish Test*; and b) having a larger number of participants completing these two tasks than other tasks. Both instructors rated students' UPM tasks using the rubric in Appendix B. The recordings from UPM tasks were uploaded on *Wimba*, downloaded, and transcribed for analysis, with the analysis focusing on student use of the linguistic units derived from the CALL readings. A research assistant, a native Spanish speaker who was not involved in task design, transcribed the recordings. The words that appeared in the multimedia glosses from the CALL readings and the frequency of the word being used was coded and entered in MS Excel. Frequency was calculated for each word. The author examined the accuracy of the analysis done by the researcher assistant.

Data collection also included the pre- and post-course test scores based on the *Versant Spanish Test*, which evaluated speaking and listening skills. The pre-test was given in the first week and the posttest on the last day of the course. The *Versant Spanish Test* provided scores for overall spoken skill, sentence mastery, vocabulary, fluency,and pronunciation. The *Versant Spanish Test* consisted of the following: reading aloud, listening and repeating, saying the opposite, answering short questions, building sentences from jumbled words, answering open-ended questions, and retelling stories. The scores automatically calculated from the test were entered in IBM SPSS (Statistical Package for the Social Sciences) 21.0. T-tests on the listening and speaking assessments determined whether there were differences between the pre-and post-

assessments—whether students' overall spoken ability improved over a period of 15 weeks.

RESULTS

The Frequency of Vocabulary and Grammatical Forms in UPM

Twenty students out of 37 completed Task 1 (business focus), and 15 completed Task 2 (engineering focus). Table 2 shows the results of Task 1. This task instructed students to compose their own stories, not requiring them to use specific vocabulary. Therefore, some learners' speaking samples did not mention the words from the multimedia glosses even once. Based on the scoring rubric (see Appendix B), participants received an average score of 89.3%. In addition, Table 2 showed that students used linguistic units in the CALL reading (bold in Table 2) that were not included in the multimedia glosses. In other words, students were able to connect meaning with some targeted linguistic forms. They were successful using the language in a meaningful way to build their own story.

Table 2
Frequency of Linguistic Units from the Business Reading

Linguistic Units	*Frequency of Linguistic Units*	*N*	*Mean*	*Score for completing the UPM*
Lograr	7	20	.35	80
Acuerdos	26	20	1.30	95
Intercambio	27	20	1.35	95
Llevar a cabo	15	20	.75	97
Importar	14	20	.70	95
Alimentos	9	20	.45	90
Procesado	9	20	.45	90
Bienes	5	20	.25	93
Valiosas	7	20	.35	90
Promedio	5	20	.25	95
Anual	7	20	.35	95
Comercial	15	20	.75	98
Cubano	9	20	.45	97
Productos	22	20	.45	95
Comida	12	20	1.10	92

Average score of UPM, Task 1 was 89.3%. (*N* =20)

Table 3 shows the results for Task 2. The words in bold came from the reading, not from the glosses. The task instructed students to compose their stories based on the reading. The fact that students used the words in the reading indicated that they combined meaning and form when communicating their ideas. Seven linguistic units out of 14 multimedia glosses were used by the participants. Some students used the words more than once, which was reflected in the frequency and mean in Table 3.

Table 3
Frequency of Linguistic Units from the Engineering Reading

Linguistic Units	*Frequency of Linguistic Units*	*N*	*Mean*	*Score for completing the UPM*
Escalada	26	15	1.73	90
Control de	14	15	.93	93
la mente	13	15	.87	97
Conocer los	9	15	.60	96
límites	6	15	.40	98
Fuerza física	6	15	.40	90
Hacer	22	15	1.46	92
hincapié	0	15	.0	90
Caída	4	15	.27	95
Montañas	12	15	.80	93
Arrebatos	17	15	1.13	96
Apurar	7	15	.47	100
fuerzas	6	15	.40	98
Cuerda	11	15	.73	98
Nudos	10	15	.67	90
Nudo: de	0	15	.0	
mariposa	6	15	.40	
Miedo	3	15	.20	
Pies	0	15	.0	
Piernas	0	15	.0	
Escalador	5	15	.33	
Apoyo	2	15	.13	
Punta	0	15	.0	
Salvamento	20	15	1.30	
Rematado	19	15	1.27	
Apretado	8	15	.53	
Aguante	8	15	.53	
Peldaños	16	15	1.06	

The average score for UPM Task 2 was 94.4%. (N =15)

Student use of glosses indicated that having a variety of modes, such as visual, auditory, and textual may facilitate vocabulary acquisition and retention (Al-Seghayer, 2001). It is noteworthy that "[l]arger vocabularies have been found to have a positive relationship with greater spoken fluency…" (Beglar & Nation, 2014, p.5). Students also used grammatical forms from the textbook.

Versant: A Test of Spoken Skills

Improving language proficiency is a desired outcome in any language course (González-Lloret & Nielson, 2014). To assess listening and speaking, descriptive statistics were used for the pre-and post-course *Versant Spanish Test* scores. In addition, a pair-samples t-test was conducted to compare the means between the pre-and posttests (see Table 4).

Table 4
Means of Pre- and Post-versant Test Scores

		Mean	*N*	*SD*	*Min.*	*Max.*
Pair 1	*Pre-overall*	37.51	37	10.03	24	67
	Post-overall	43.16	37	10.46	26	71
Pair 2	*Pre-sentence Mastery*	35.89	37	13.14	20	71
	Post-sentence Mastery	46.35	37	13.12	28	77
Pair 3	*Pre-vocab*	33.54	37	17.79	20	80
	Post-vocab	40.16	37	19.68	20	80
Pair 4	*Pre-fluency*	40.16	37	8.13	25	67
	Post-fluency	43.97	37	9.26	24	75
Pair 5	*Pre-pronunciation*	43.59	37	6.68	33	64
	Post-pronunciation	46.56	37	7.71	34	72

The mean score for the overall spoken skill on the pre-test was 37.51 and on the post-test was 43.16, showing an improvement of 5.65 points after the course. During the course, students learned with various oral tasks: asynchronous tasks based on content-based texts, synchronous online sessions in the virtual world of *Second Life*, and communicative tasks with co-learners during face-to-face sessions. A list of minimum and maximum scores in every category was also provided in Table 4.

The Pearson correlation coefficient determined the relationship between the pre- and post-course test scores. There was a significant correlation between the two variables (r=.870, N=37, p=.000). The correlation coefficient for pre- and post-sentence mastery scores showed a significant correlation (r=.858, N=37, p=.000). The same was true for pre- and post-vocabulary scores (r=.540, N=37, p =.001), pre- and post-fluency scores (r=.609, N=37, p=.000), and pre- and post-pronunciation scores (r=.647, N=37, p=.000).

The two-tailed probability for the overall and the four subcategories scores in the *Versant Spanish Test* was low (p=.000; p=.001; p=.032; p=.005, and p=.005), indicating that there are .00%, .01%, .32%, .05%, and 0.5% possibilities that the values of the t could happen by chance alone. All the pre- and posttest scores were statistically significant ($p < .05$), with the course effect on fluency and pronunciation (-3.810 and -2.972, respectively) smaller than that on sentence mastery and vocabulary (-8.411 and -6.621) (See Table 5).

Table 5
t-test Results for Pre- and Post-Versant Test Scores

	Mean	*SD*	*t*	*df*	*Sig. (2-tailed)*
Pre-overall *Post-overall*	-5.64865	5.25048	-6.544	36	0.000
Pre-sentence *Post-sentence*	-8.41176	8.19343	-4.233	36	0.001
Pre-vocab *Post-vocab*	-6.62162	18.05139	-2.231	36	0.032
Pre-fluency *Post-fluency*	-3.81081	7.75972	-2.987	36	0.005
Pre-pronunciation *Post-pronunciation*	-2.97297	6.12139	-2.954	36	0.005

DISCUSSION

The following two research questions guided the Spanish hybrid intermediate course:

1) What types of language and content features from the CALL readings did the learners acquire?
2) Within the hybrid environment, what was the L2 learners' overall Spanish skill as measured by the *Versant Spanish Test*?

The first question was important because the course content came from authentic materials, which were supplemented with tasks to suit intermediate learners. The CALL materials were developed following three SLA hypotheses suggested by Chapelle (1998): (a) salient input; (b) assistance comprehending input; and (c) opportunities to produce output in the target language. The test scores showed that some words from the multimedia glosses and from the readings were produced by learners, indicating that they used their second language knowledge to produce output in speaking. The frequencies and means of the target forms reported in Tables 2 and 3 evidenced language use that may lead to language acquisition.

Test results showed that learners' overall spoken skill and all four subcategories (vocabulary, sentence mastery, fluency, and pronunciation) improved at the end of the course. The improvement was illustrated by the pre- and post-test scores. Students scored between 20 and 80, with a score range of 60. The mean overall score increased 5.648 points, meaning an improvement of 9.4% on the test. The results were aligned with González-Lloret and Nielson's research (2014), in which improved results in spoken skills demonstrated the effectiveness of a TBLT program. Although our course was a combination of technology-mediated TBLT and traditional approach, the learning outcome implied the effectiveness of the technology-mediated TBLT approach for language learning.

In this case study, the course adopted technology-mediated TBLT in a hybrid learning environment by providing tasks focusing on four features—meaning, goal orientation, holism, and learner-centeredness. Moreover, the technological affordances were considered when pedagogic tasks were designed. The course had an effect on students' sentence mastery, vocabulary, overall oral skill, fluency, and pronunciation (in order of largest to smallest). In terms of the lesser effect on pronunciation, it was possible that some did not use the pronunciation aid built in the multimedia glosses. Although the CALL readings had the multimedia glosses to develop language skills, they might have only used the other aids (i.e., synonyms, translations, and visual representations) because they needed them to complete the online "Después de leer" quiz (see Figures 2 and 3). It may be that some learners were so focused on meaning and form that they neglected pronunciation. Furthermore, recording their speech on *Wimba* as part of a UPM task was a self-learning process. Whereas instructors provided oral and written feedback, it was not known if they used the feedback to develop speaking skills. This might have been corrected if students had been encouraged to engage in *reflective learning* as suggested by González-Lloret and Ortega (2014).

Learners were exposed to real language through authentic texts and tasks (e.g., interaction with native Spanish speakers and the instructor of the course, feedback from the instructor…). The outcome showed that a task-based approach in the hybrid environment could be effective when content and language were integrated. The course was organized following a weekly pattern of tasks (i.e., the use of *Second Life* during online sessions and the completion of writing and spoken tasks based on content-based texts). The fact that students did them repeatedly may have helped learning and acquisition. According to Cook (1993), for acquisition to take place, learners must take in the appropriate parts of the input. Content-based materials provided input via auditory and visual channels (multimedia glosses) and to foster language production by means of meaning-focused tasks. In fact, the benefits of reading CALL business and engineering texts were not limited to the task-cycle stages. "Language focus involves thinking about language in the context of a meaning-focused activity" (Willis & Willis, 2007, p.116). The oral UPM tasks raised learners' awareness of specific lexical items and grammatical structures in the planning stage (i.e., the time spent on preparing the oral report). As a result, they successfully completed the oral UPM

tasks by creating their own stories, combining the content and the linguistic forms from the CALL readings. Additionally, language output informed the teachers that they completed the role-play tasks successfully by focusing on the meaning and forms of language. A task-based approach (Nunan, 2004; Norris, 2009; Willis & Willis, 2007) allowed learners to use and acquire language. As Willis and Willis (2007) pointed out, TBLT is a successful approach to SLA because learners are exposed to real language—they use the language to solve a problem.

CONCLUSIONS

This study has limitations in its research design. First, it had a small number of participants; consequently, the results are not generalizable. Second, it did not include a control group (i.e., a face-to-face course without task-based oral assessments). As a result, we cannot attribute the oral proficiency improvement solely to the hybrid course design, as face-to-face contact hours with instructors and classmates, online sections in the virtual world, and online conversations with a native speaker might have contributed to student language gains, which were demonstrated by their pre- and post- versant Spanish Test scores. Moreover, it did not include qualitative data from students' perceptions about the task-based oral assessments, which has limited the interpretation of the results. Further research examining student perceptions through qualitative data may provide valuable information on the usefulness of the oral tasks.

Evaluation of this technology-mediated TBLT course delivered in a hybrid environment is valuable for us to reflect on and improve teaching practices. For example, tasks may be enhanced by adding a reflective learning step as suggested by González-Lloret and Ortega (2014). After finishing speaking tasks, students could reflect on language use.

NOTES

1. *Second Life* is a popular online 3-D virtual game often used as an immersive teaching environment, featuring real-time engagement and collaboration through voice and text. For more information on how *Second Life* is used in educational settings, see http://go.secondlife.com/landing/education/
2. *Versant Spanish Test* is an automated oral language assessment that can be completed in 15 minutes on the Internet or over the telephone. It correlates highly with the American Council on the Teaching of Foreign Languages (ACTFL) Oral Proficiency Interview (OPI) with a correlation of 0.88. For more information, see http://www.versanttest.com/technology/VersantSpanishTestValidation.pdf

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APPENDIX A

Illustrative Example of CALL Readings: Instructions for Speaking Tasks and Description of Task Types

Title of CALL reading for Chapter 7 and business topic: "*Panamá y Cuba inician negociaciones comerciales para un acuerdo de alcance parcial*" [*Panama and Cuba begin commercial trades for an agreement with a partial scope*]

Instructions: In your job as a reporter you just heard the news about the commercial exchanges between the U.S. and Cuba. Leave a message announcing the news you heard. In your message mention the type of commercial exchanges that these two countries will have. You will also talk about how this news has affected the Americans and the Cubans, presenting the reasons of those who support and oppose the trades. Read the section of Chapter 7, "*Panamá y Cuba*…," again and use it as a model to compose your own story. Think about the content of the "after reading" quiz to revise the content.

Description: In order to perform the task, students needed to comprehend vocabulary related to negotiation and present and present perfect tenses, which were provided in the CALL reading. The skills involved for the task of reporting news included reading, listening, and speaking. The learning outcome for delivering a public announcement was based on the following "can do" statement: Can deliver short, rehearsed announcements about a topic relevant to everyday occurrences in his/her field which, despite foreign stress and intonation, are nevertheless clearly intelligible.

Title of CALL reading for Chapter 7 and engineering topic: "*Alforjas artesanales para bicicleta*" [*Handcrafted saddlebags for a bicycle*]

Instructions: Your boss has sent you on a business trip to Guatemala to demonstrate to an engineering company how to manufacture an artifact using various materials. Leave a message describing a specific artifact, explain the type of materials you need to use, and the reason for using those specific materials. Summarize your message with a wrap-up of all points (e.g., advantages of the artifact) you have introduced. Read Chapter 7 reading "*Alforjas artesanales*…," and use it as a model to build your own story. Think about the "after reading" quiz to revise the content.

Description: In order to perform the task, students needed to comprehend vocabulary about materials to build handcrafted objects and present perfect tenses, which were provided in the CALL reading. The skills involved for the task of describing and explaining an artifact included reading, listening and speaking. The learning outcome for addressing the audience was based on the following "can do" statement: Can give a prepared straightforward presentation about a

familiar topic within his/her field which is clear enough to be followed without difficulty most of the time, and in which the main points are explained with reasonable precision.

Title of CALL reading for Chapter 12 and business topic: "*Sequía en Suramérica: La peor sequía en décadas crea pérdidas millonarias e incendios en Suramérica*" [*Drought in South America: The worst drought for decades causes fires in South America and major losses amounting to millions*]

Instructions: Paraguay suffered from forest fires in the summer. Four-hundred firemen could not stop the fires, and the department of Canindeyú had asked for volunteers with experience to stop the fire. You were involved in helping Paraguay because you had experience as a fireman. For this assignment, leave a message about your experience in extinguishing fires. Provide five explanations for what you could have done if you had been a fireman with more experience. Include any details that can be useful for future firemen. Read "*Sequía en Suramérica…*" in Chapter 12 and use it as the model for your own story. Think about the "after reading" quiz to revise the content.

Description: In order to perform the task, students needed to comprehend vocabulary about fires, geography, and climate, which was provided in the CALL reading. They also needed to produce past, past perfect, and perfect conditional tenses, and obligation verbs which were provided in the textbook. The skills involved in the task included reading, listening, and speaking. The learning outcome for describing experiences was based on the following "can do" statements:

- Can reasonably fluently relate a straightforward narrative or description as a linear sequence of points.
- Can relate details of unpredictable occurrences; e.g., an accident.
- Can describe events real or imagined.

Title of CALL reading for Chapter 12 and engineering topic: "*Nudos para escalada*" [*Climbing knots*]

Instructions: You are a mountaineering instructor and are preparing your advanced students to climb the Alps. Your students will climb the Alps on Saturday, but you won't because of an emergency. The following Monday your students will tell you about their unsuccessful experience. Leave a message with five explanations of the steps you would have taken for five or more problems that your students may encounter in their climbing experience. Read "*Nudos para escalada*" in Chapter 12 and use it as the model for your story. Think about the "after reading" quiz to revise the content.

Description: In order to perform the task, students needed to comprehend vocabulary about mountain climbing provided in the CALL reading. They also

needed to produce the perfect conditional and obligation verbs provided in the textbook. The skills involved in the task included reading, listening, and speaking. The learning outcome for describing experiences was based on the following "can do" statements:

- Can reasonably fluently relate a straightforward narrative or description in a linear sequence.
- Can narrate a story.

APPENDIX B

Rubric for Spoken UPM Tasks

Student responds to the learning outcomes and content of the task	
Information is interesting, complete, and relevant to the task.	20-16
Information is complete and relevant to the task, but not interesting.	15-11
Information is adequate and related to the task, but needs details.	10-6
Minimal information related to the task	5-1
Information provided is not relevant to the task.	0
Student demonstrates Spanish language fluency.	
Information is completely comprehensible.	20-16
Information is mostly comprehensible and sometimes slow.	15-11
Information is incompressible with frequent errors and pauses.	10-6
Information is incomprehensible with long pauses.	5-1
Student demonstrates Spanish language vocabulary.	
Vocabulary is completely appropriate and relevant to the task.	20-16
Vocabulary is somehow appropriate and related to the task.	15-11
Vocabulary is adequate and related to the task.	10-6
Vocabulary is inappropriate for the task.	5-1
Student demonstrates Spanish language pronunciation.	
Generally good, accurate stress and intonation	20-16
Rather good but with some striking non-Spanish sounds	15-11
Frequent errors pronouncing English vowels and consonants	10-6
Generally poor, use of non-Spanish vowels and consonants, incorrect stress	5-1
Student demonstrates Spanish language accuracy.	

Grammar is completely appropriate for the situation with no errors.	20-16
Grammar is adequate for the situation with minor patterns of errors.	15-11
Grammar is related to the situation with some patterns of errors.	10-6
Grammar is inappropriate for the situation or there are significant errors	5-1

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