Papers

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**Prior Experience and Student Satisfaction with E-Tandem Language Learning of Spanish and English**

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**Abstract**—Recent literature in the field of foreign language learning has indicated that classroom learning is not necessarily enough for students to acquire proficiency in a foreign language. Learners who achieve a high level in the target language often combine work in the classroom with activities outside it. At the same time, a number of studies indicate that, when foreign language learners do work with their target language beyond the classroom, it is often to practice the receptive skills of reading and listening as opposed to the productive ones of speaking and writing. For this reason, students at The College of New Jersey in the United States and Universidad de Alcalá in Spain were paired up to work in tandem to practice Spanish and English through a private Facebook© page and Skype calls©. This paper discusses the impressions of 195 participating students on both sides of the Atlantic to the activities as determined through a questionnaire. The overall objective was to determine if prior experience with the two applications and in using the foreign language in conversation has an impact on student satisfaction. The results indicate prior experience with the applications and with the target language correlates with a positive estimation of the activities. Additional variations were also found. Language instructors who wish to set up an e-tandem experience are advised to assist students with less experience so that they can benefit from the activity.

**Keywords**—Foreign language learning, telecollaboration, e-tandem learning, social networks, VOIP

1 **Introduction**

Recent literature on foreign language learning has started to indicate that learners who show a high degree of proficiency often combine work inside the classroom with activities outside their classes [1], [2], [3], [4]. In fact, studies from the past few years have revealed that students who use the target language for entertainment as opposed
to learning purposes equal or outperform others who learn the language in classes alone [5], [6], [7]. Nevertheless, research tends to show that learners who practice the language beyond the walls of the classroom work more on the receptive skills of listening and reading [8], [9], [10], [11].

Thanks to Web 2.0 and new technologies such as mobile phones, there are more opportunities to practice the productive skills of speaking and writing in a foreign language anywhere without the need to leave one’s home country. Social networks, voice-over Internet protocol (VOIP) technology, blogs and other tools and applications can be used by learners to communicate in the target language with other speakers [12]. For these reasons, many language instructors in different countries have been setting up language projects using these services and tools in order to provide their students with opportunities to reinforce their language skills.

Nevertheless, a number of concerns arise alongside these new opportunities. For example, students may or may not have had experience using new technologies and Web 2.0 resources or they may feel uncomfortable speaking in the target language if they have never had to do so. If students are unfamiliar with the tools used, the time they take in adjusting to them will detract from their learning of the language [13]. At the same time, approaching a conversation with a native speaker of the target language can be a daunting experience for many students, especially if they have learned the language in a traditional classroom setting that focuses on grammar more than on conversation.

This study seeks to examine the extent to which prior experience with Facebook© and Skype© and with communicating orally in the target language have an impact on student satisfaction with a tandem learning experience using these two applications. Other aspects examined were the participants’ estimations of their learning, their perceptions of their ability to carry out the activities, and their views of the amount of assistance they received from their tandem partners and the professors, all in relation to their liking the activities done. The data were obtained over the course of three semesters from six different class groups, one each in Spain and in the United States for each of the semesters. The results of this study will shed light on aspects of tandem learning project design that foreign language instructors should improve to promote a more effective experience for the students involved.

2 Facebook© and Skype© for language learning

Thanks to Web 2.0, the Internet has evolved from being a static repository of information to an environment in which users are able to react to the content of others in addition to creating one’s own [14]. This shift parallels the distinction in the receptive and productive skills of language learning, meaning that foreign language learners and users now have an enormous potential to practice the skills of speaking and writing with people around the world without leaving their homes. While they do not always do so, as evidenced in the studies mentioned above, many language teachers and researchers have been taking advantage of this situation in order to create ex-
changes and, hence, facilitate communication and practice of these skills using of a variety of tools including Facebook© and Skype©.

The possibilities afforded by Facebook© for users to post comments, photographs and videos to a group of friends who are part of the network have been tapped into by language educators around the world as evidenced by a large body of research (see [15] for a review of some of this work). Use of this social network can serve as a first step for students who will be participating in a conversational exchange with native speakers of their target language as it enables them to get to know each other before starting live conversations with an individual they do not know, an issue of concern in the use of Web 2.0 tools for language learning [16]. In this sense, the Facebook© phase is part of a larger educational project with a specific objective and outcome, which ensures that the experience is meaningful [17].

The use of Skype© for telecollaboration is well documented thanks to a number of monographs, special issues of journals and individual research articles [18], [19], [20], [21], [22]. Thanks to voice over Internet protocol (VOIP) technology, users are able to converse in real time with people from around the world, therefore opening up the possibility for language teachers to provide their students with the chance to improve their communicative competence, their knowledge of the other culture, and their independence as learners [23].

The present study involves an e-tandem project, a particular kind of telecollaboration. In this case, native speakers of one language are paired with native speakers of another language with the aim of practicing their respective languages [24]. In this type of exchange, the learners are often responsible for deciding on the topic of conversation and for correcting each other and/or providing target language input [25]. This kind of project is based on the sociocultural and constructivist approach to learning [26], [27], which posits that learning takes place through social interaction with more experienced participants. In this case, the native speakers take the role of experts, whose interaction has the potential to facilitate learning on the part of the non-native speakers.

Numerous studies have examined students’ opinions of using Facebook© and Skype© for language exchanges. Research often indicates a positive view (for example, [28], [29], and [30], but no study appears to have examined students’ prior experience with Facebook© and Skype© in relation to their opinions of learning activities involving their use. At the same time, we have been unable to find studies that examine the effect of students’ prior experience in speaking in the target language and their satisfaction with e-tandem learning.

In addition, variations have been found related to the country of origin of student groups involved in language learning activities that require technology. For example, differences in levels of acceptance and anxiety related to the use of Web 2.0 tools such as Facebook© and Skype© have been found for students in higher education [31]. Moreover, Spain has traditionally been a country with a heavy focus on grammar and correction of mistakes [32], along with little opportunity for communicative practice in the classroom until the recent implementation of bilingual education programs [33]. Classes in the United States, however, focus on communicative competence [34].
For all of these reasons, this study involving 125 students in Spain and 72 students in the United States examines the following questions:

1. Does prior experience with Facebook© and Skype© correlate with students’ satisfaction with the e-tandem learning experience using these two applications? At the same time, is there a correlation between prior experience in speaking English and the students’ satisfaction with the experience?
2. Do students’ overall opinions of e-tandem learning activities correlate with their perceptions of the amount they learned, their ability to carry out the activities and the assistance they received during the project?
3. Are any differences found based on the students’ country of origin?

The data for this study was collected through a questionnaire answered by the participants at the end of each of the three semesters of its duration. The findings will determine aspects that foreign language teachers and instructors interested in promoting e-tandem learning experiences should improve in an effort to make future collaborative projects more effective.

3 The TCNJ-UAH Facebook© and Skype© language exchange

The activities discussed in this paper were carried out in three separate semesters between September 2015 and December 2016. At the start to each semester, a private Facebook© page was created for the two groups of students participating in the two countries in that period so that they could introduce themselves and get to know each other at the start to the exchange. Each participant was then paired up with one or two students from the other country depending on the number of overall participants at each university. The students were assigned to talk in Spanish for fifteen minutes and in English for another fifteen minutes without mixing the two languages. Each American student normally did six calls during the semester in which they participated and the Spaniards did three calls each since the ratio of students was normally 1:2.

The American students were enrolled in Intermediate or Advanced Spanish conversation while the Spanish students were taking a first-semester advanced English course that focuses on the four language skills of reading, writing, listening and speaking. The students from the United States were majoring in a variety of different disciplines and were completing a foreign language requirement for their university in taking the course, but the Spaniards were majoring in English Studies or Modern Languages and Translation, for which their course is a requirement. A total of 123 participants were from Spain and 72 were from the United States. Of the overall number, 157 people were female while the remaining 38 were male. All of the learners except for two were between the ages of 18 and 25.

A few changes in the activities were implemented with the change in participants each semester. In the first, the activities were not counted as part of the final grade, but instead were used as an optional component that could assist in language learning. In the second and third semesters, however, participation on the Facebook© page and submission of recordings made while using Skype© were considered in the participa-
tion and speaking grades because inclusion of e-tandem learning tasks in student
grades has been shown to have a positive impact on the activities [35]. In all of the
cases, a calendar was provided with topics for required posts to Facebook© including
an initial introduction, a description of a favorite dish, and a recommendation to visit
a favorite place; it also listed dates for submission of the recordings. In addition, the
students received the link to an online guide for tandem language learning in the tar-
get language in case they felt at a loss for topics to discuss with their partners [36].
During the second and third semesters, the professors also took part more actively in
the Facebook© page and even added their own posts similar to the students’ ones
since it has been found that interaction with instructors and instructor self-revelation
bring about a shift in student motivation and involvement in learning communities on
Facebook© [37].

4 Method

The questionnaires contained a variety of prompts including closed questions on
demographic information and prior experience using the two applications and the
target language, affirmations about the two activities to rate using a five-point Likert
scale, and open questions that asked them to elaborate on different aspects of the
experience. A few of the statements were written in the negative in order to prevent
students from answering them automatically without thinking, and some slight modi-
fications were also made to the statements over the course of the three semesters and
will be highlighted as needed below. The quantitative questions and statements were
analyzed using descriptive statistics and are the focus of the present paper. The origi-
nal questions and statements can be found in Appendix 1, while tables with the statis-
tical values are in Appendix 2.

Statistical analyses were used to determine significant correlations between the di-
ferent questionnaire responses related to prior experience and student satisfaction with
the activities. Correlations were then sought between the students’ levels of satisfac-
tion with the activities and their estimations of their learning gains, their perceptions
of their ability to carry out the tasks, and their impressions about assistance that they
had received. The multivariate frequency distribution of the variables was also calcu-
lated. In doing so, the original five options on the Likert scale were recoded into three
categories, one each for the positive and negative values and a third for the neutral
responses, in order to achieve a greater level of reliability. Only the statistically sig-
nificant or nearly significant findings are reported below. The wording of the original
negative statements on the questionnaire has been modified in the tables included in
the body of this article in order to facilitate reader understanding; the original phras-
ing can be found in Appendices 1 and 2.
5 Results

5.1 Prior experience

It was observed that experience with Facebook© varied between the groups from the two sides of the Atlantic, with the Americans showing a consistently high degree of familiarity (+96%) and the Spaniards indicating increasingly lower levels of use over the three semesters, ranging from 91.7% to 58%. This finding, however, is affected by an adjustment in the wording of the question in the final semester, which changed from asking about prior familiarity to asking if the participants were ‘regularly users’ of the application. In terms of prior experience with Skype, the results show that the percentages of use of the application were generally higher for the Spaniards but that the numbers for both countries dropped over the course of the study (Spain: 95.8%-76.5%; USA: 84.6%-72.7%).

Despite these differences in experience with the two applications, all of the groups reported liking the two language learning activities. They rated them with average values between 3.67 and 4.22 for the Facebook© activity and between 3.38 and 4.52 for the Skype© experience on the five-point Likert scale over the course of the three semesters. Nevertheless, a number of lost values, especially in the first semester, require these numbers to be considered with caution. Generally, the Americans gave slightly more positive values than the Spaniards for both activities. As can be seen in Table 1, statistically significant Chi-square correlations of at least p<.05 were found between having prior experience with Facebook© and liking the Facebook© activity for the overall group (.347) and Spain (.352) in the third semester and for prior experience with Skype© and liking the Skype© activity for the overall group (.379) and Spain (.438) in the second semester. Correlations were also found for a positive estimation of the Facebook© activity and having experience with Skype© for the overall group in the first semester (.364) and for Spain in both the first and second semesters (.569 and .342 respectively). All of these results indicate that prior contact with the applications was linked to a favorable opinion of the activities, even if the activity was carried out with the other application. In other words, some prior contact with the technology helped their impressions.

Many of the participants in both countries indicated that they had had at least some prior experience speaking in the target language outside class before the semester. Nevertheless, the combined percentages for “some experience” or “often” were generally higher for the Spaniards than for the Americans; the lowest value for the former group was 79.2%, compared to the highest value of 69.3% for the latter group. As can be seen in Table 1, prior use of the target language was found to correlate to a level of at least p<.05 with liking the Skype activity (USA, first semester, .557) and with knowing what to talk about with a partner on Skype (USA, third semester, .553). That is, students who had practiced their target language outside class before the semester tended to have a positive opinion of the Skype© activity more than those who had not, and they also tended to know what to talk about more than those who had less prior experience using the language they were studying.
Table 1. Prior experience

<table>
<thead>
<tr>
<th></th>
<th>Fall 2015</th>
<th>Spring 2016</th>
<th>Fall 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>I liked FB activity and I had used FB</td>
<td>Spain (.442/.055) N=24</td>
<td>Overall (.347/.007) N=73 Spain (.352/.027) N=51</td>
<td></td>
</tr>
<tr>
<td>I liked Skype activity and had used Skype</td>
<td>Overall (.379/.017) N=72 Spain (.438/.003) N=49</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I liked FB activity and had used Skype</td>
<td>Overall (.364/.025) N=48 Spain (.569/.003) N=24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I liked Skype activity and had used target language</td>
<td>USA (.557/.050) N=21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I know what to talk about on Skype and had used target language</td>
<td>USA (.553/.046) N=22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>My level of foreign language increased and I had used Skype</td>
<td>Spain (.483/.026) N=24 USA (.465/.048) N=22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>My level of foreign language increased and I had used target language</td>
<td>Spain (.616/.023) N=24</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Contingency coefficients and statistical significance of Pearson chi-square test for prior experience. Values in italics were very close to significant. See appendix 1 for the actual wording of the original statements.

The responses to the questions about improvement of target language level and understanding of the other culture reveal that both groups were consistently positive over the course of the three semesters with values ranging from 3.38 to 4.61 for language gains and from 3.79 to 4.78 for increased cultural understanding on the five-point Likert scale. Both the Americans as well as the Spaniards consistently rated their learning about the other country’s culture higher than their language gains. As observed in table 1, statistically significant correlations with at least $p<.05$ were found for the perception of increased learning of the target language and prior experience with Skype for Spain in the first semester (.483) and the United States in the third semester (.465). Prior experience using the target language was also found to correlate with perception of language gains for Spain in the first semester (.616). In other words, the students who indicated that they had had prior experience in either regard tended to respond saying that they had gained more from the activities.

5.2 Student estimations of the activities and other factors

After the students’ indications of prior experience were examined in light of their estimations of the activities, some additional correlations were calculated. Specifically, their responses about liking the Facebook© and Skype© activities were crossed with those concerned with their perception of learning, their impressions of being able to carry out the activities and their views of the amount of assistance that they received. Statistically significant correlations were found most often with regard to the first group: perceptions of learning. These values (Table 2) also revealed stronger correlations in comparison to the other variables considered.

http://www.i-jim.org
If a relation was found above between the perception of language learning gains and experience in the foreign language and with Skype©, stronger correlations (p<.01) were found when comparing the perception of language gains and the estimations of the two activities. In particular, a positive view of the Facebook© activity and the feeling that language ability had increased were found to correlate in the first semester for the overall group (.538) and Spain (.638) as well as in the second semester for the overall group (.609) and Spain (.632). Liking the Skype© activity and the impression that language ability had gone up correlated in the second semester for the overall group (.600) and Spain (.629) and in the third semester the same groups (.481 and .502 respectively). The comparisons related to increased cultural understanding tended to correlate less closely with positive opinions of the activities but they were still statistically significant. The values worth highlighting in this sense are for the relation between increased cultural understanding and liking the Skype© activity in the second semester; in this case, the overall group and Spain were both found to be highly correlated with p<.01 (.513 and .551 respectively).

### Table 2. Impressions of learning gains

<table>
<thead>
<tr>
<th>Activity Description</th>
<th>Fall 2015</th>
<th>Spring 2016</th>
<th>Fall 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>My level of foreign language increased and I liked FB activity</td>
<td>Overall (.538/.001) N=46 USA (.638/.004) N=22</td>
<td>Overall (.609/.000) N=72 Spain (.632/.000) N=49</td>
<td>Overall (.600/.000) N=72 Spain (.629/.000) N=49</td>
</tr>
<tr>
<td>My level of foreign language increased and I liked Skype activity</td>
<td>Overall (.600/.000) N=72 Spain (.629/.000) N=49</td>
<td>Overall (.481/.000) N=72 Spain (.502/.002) N=50</td>
<td>Overall (.481/.000) N=72 Spain (.502/.002) N=50</td>
</tr>
<tr>
<td>My understanding of the other culture increased and I liked Skype activity</td>
<td>Overall (.513/.000) N=72 Spain (.551/.000) N=49</td>
<td>Overall (.513/.000) N=72 Spain (.551/.000) N=49</td>
<td>Overall (.513/.000) N=72 Spain (.551/.000) N=49</td>
</tr>
</tbody>
</table>

Contingency coefficients and statistical significance of Pearson chi-square test for estimations of the activities and impressions of learning gains. See appendix 1 for the actual wording of the original statements.

The students’ impressions of their ability to carry out the activities and their estimations of the activities tended to show intermediate levels of correlation. In fact, these questions were affected by lost data in the first semester more than the aspects discussed up to this point. All of this means that to a lesser extent the students who enjoyed the activities tended to feel that they were able to explain themselves better when helping their partners on the other side of the Atlantic and they felt more at ease when looking for topics of conversation. Worthy of note is the value obtained for knowing what to discuss on Skype© and liking the Facebook© activity for which a strong correlation was found in the first semester for the United States (.628). Another close correlation, again in the same semester, was between feeling the activities were easy to do and liking the Skype activity (USA, .639).
Table 3. Capacity to carry out the activities

<table>
<thead>
<tr>
<th>Activity</th>
<th>Fall 2015</th>
<th>Spring 2016</th>
<th>Fall 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>I was able to explain things about my language on Skype and I liked Skype activity</td>
<td>Overall (.474/.000) &lt;br&gt;N=72 &lt;br&gt;Spain (.484/.005) &lt;br&gt;N=49</td>
<td>Overall (.372/.022) &lt;br&gt;N=71 &lt;br&gt;Spain (.402/.051) &lt;br&gt;N=49</td>
<td></td>
</tr>
<tr>
<td>I knew what to talk about on Skype and I liked FB activity</td>
<td>USA (.628/.019) &lt;br&gt;N=18</td>
<td>USA (.474/.036) &lt;br&gt;N=23</td>
<td>Overall (.390/.012) &lt;br&gt;N=72 &lt;br&gt;Spain (.490/.003) &lt;br&gt;N=50</td>
</tr>
<tr>
<td>I knew what to talk about on Skype and I liked Skype activity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The activities were easy to do and I liked Facebook activity</td>
<td>USA (.639/.011) &lt;br&gt;N=19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The activities were easy to do and I liked Facebook activity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The activities were easy to do and I liked Skype activity</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Contingency coefficients and statistical significance of Pearson chi-square test related to student impressions of being able to carry out the activities. Values in italics are close to significant. See appendix 1 for the actual wording of the original statements.

Finally, assistance from the partner and/or from the professor and the students’ estimations of the activities showed intermediate to strong correlations. Receiving help from the partner on the other side of the Atlantic correlated more often and more strongly than did the opinion that more guidance from the instructor at the onset to the Skype© activity would have made it easier, meaning that the support from a peer was a more important factor in valuing the activities. It is also of interest to point out that all of the correlations obtained were for the overall group and for Spain, but not for the students in the United States. The strongest correlations were observed in the second semester for receiving help from the partner and having a positive opinion of the Facebook© activity (Spain, .547; overall, .538) and receiving help from the partner and liking the Skype© activity (Spain, .591; overall, .567).

Table 4. Help received

<table>
<thead>
<tr>
<th>Help received</th>
<th>Fall 2015</th>
<th>Spring 2016</th>
<th>Fall 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>My partner on Skype helped me when I had difficulties and I liked FB activity</td>
<td>Overall (.538/.000) &lt;br&gt;N=72 &lt;br&gt;Spain (.547/.000) &lt;br&gt;N=49</td>
<td>Overall (.567/.000) &lt;br&gt;N=72 &lt;br&gt;Spain (.591/.000) &lt;br&gt;N=49</td>
<td>Overall (.363/.028) &lt;br&gt;N=72 &lt;br&gt;Spain (.396/.054) &lt;br&gt;N=50</td>
</tr>
<tr>
<td>My partner on Skype helped me when I had difficulties and I liked Skype activity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More guidance from teacher at start would have made Skype activity easier and I liked Skype activity</td>
<td></td>
<td></td>
<td>Spain (.405/.043) &lt;br&gt;N=50</td>
</tr>
</tbody>
</table>

Contingency coefficients and statistical significance of Pearson chi-square test related to receiving help. Values in italics are close to significant. See appendix 1 for the actual wording of the original statements.
6 Discussion

The first finding that must be highlighted is the fact that the students were generally positive about the experience using Facebook© and Skype© for learning a foreign language regardless of whether they had had prior experience with the applications or the target language. Nevertheless, prior experience with either of the two applications tended to lead to a positive opinion of the activities, as was the case of the correlation between experience with Skype© and liking the Facebook© activity. This finding suggests that familiarity with technology use has a transfer effect, so students who have more experience with Web 2.0 tools can be expected to adapt more easily to new applications used in the classroom and to take fuller advantage of the learning experience since they can focus directly on the task at hand. This notion is further supported by evidence that the students who had a favorable opinion of the Facebook© activity indicated that they knew what to discuss on Skype©. Instructors will need to provide support to those students who have no or relatively less experience so that they can benefit more from an e-tandem learning experience. As indicated above, however, prior use of the two applications varied between the two countries so teachers from different countries will predictably have to focus on assisting their students with the use of different tools. Because teacher digital competence has been found to correlate with use of educational technologies in the classroom [38], they too will need to become versed in the use of Web 2.0 tools if this type of language exchanges is to be fostered.

In terms of prior experience using the target language, few of the students indicated that they had never practiced conversation before the Facebook© and Skype© activities, and those who had had some practice before the semester tended to like them more. Once again, this finding reveals that experience facilitates students’ ability to take advantage of the learning activities, enabling them to focus on the conversational task instead of having to focus on using the language in a communicative situation for a first time. Knowing that this is the case, language instructors are well-advised to prepare students for an initial conversation in the first classes through simulations and exercises involving conversation. This is particularly the case for the students in the United States, for whom prior language experience correlated slightly more often with a positive opinion of the activities. It is also highly advisable to help students find topics to discuss at the start since the participants in this study who had not had prior conversational experience tended to have more difficulty finding something to discuss with their partner in the other country. Providing a guide such as [36] is not enough for students without experience using the language.

Also worthy of note regarding prior experience with technology and with the language is the finding that experience correlated with the students’ impressions that they had learned. This means that familiarity with an application or the language itself not only enables students to focus on the learning task, as mentioned above, but it also facilitates increased learning, at least in the students’ opinions. This is further evidence that teachers need to scaffold activities both in terms of the technology and in terms of the language situations.
The findings related to the students’ liking the two activities in relation to their perceptions of their learning gains, their ability to carry out the activities and the assistance they received during the semester, research question two, reveal trends that are a function of the country and, hence, relate to research question three. In fact, some of the strongest correlations were obtained for the Spanish students’ liking the activities and their impression that they had improved their linguistic ability as well as their cultural understanding. Other interesting correlations for Spain were between liking the activities and their impressions of having received help from their partners and not needing additional help from the teacher. These differences compared to the students from the United States most likely stem from the different approaches taken in the teaching of foreign languages in the two countries, mentioned above. Hence, the Facebook© and Skype© activities presented here entail a new way of practicing a traditional school subject for these Spaniards, who received their schooling prior to the start-up of the bilingual program. At the same time, students from the United States tend to offer lexical and morphosyntactic feedback as well as metalinguistic explanations [39], feedback that would appeal to their Spanish counterparts.

7 Conclusion

This study has found that there is a link between experience using the Web 2.0 applications of Facebook© and Skype© and student satisfaction with e-tandem language learning activities and that there is some transfer between applications, meaning that experience with one tool can facilitate use of another one and, hence, allow students to focus on the learning task at hand. A link between prior experience using the foreign language in conversation and the learning activities was also found. For all of these reasons, it is paramount that foreign language teachers interested in promoting e-tandem activities provide assistance to those students who lack experience in technology so that they are not left behind in their attempts to adjust to using the technology or the language itself, when they could be learning about the target culture and furthering their proficiency.

This study has also found differences between the two countries that most likely stem from the varied foci of the foreign language classroom in each. The students from Spain showed higher correlations between perceived learning gains and their satisfaction with the activities and between the impression of having received help during the activities and their liking them. The practice of conversation in the target language with a speakers of English from the United States via Skype© complements traditional language classes in several ways. Thus, teachers in Spain will find it beneficial for their students of English to set-up organized, structured learning activities involving communication via Web 2.0 tools, especially for groups who have not been come up through the bilingual education program. Correlations were found for both countries for the students’ impressions that they were able to carry out the activities and their impression of the tasks. These results highlight the importance of setting up activities that students will feel able to do and that will foster peer assistance.
Further research will need to determine whether similar results are found for more learners in these same two countries and in other countries involved in e-tandem exchanges and telecollaboration. This is particularly important given the lost data, especially in the first semester. Future work should also examine more closely the specific difficulties encountered during e-tandem activities by the students who had relatively less experience with the applications and with the target language. Additional investigation in this regard will provide a more precise direction for instructors to take in preparing these students in the first weeks of work prior to an exchange so that they do not fall behind more experienced learners who are able to take full advantage of the learning experience from the start. In doing so, they will be promoting a more entertaining way of using the productive skills of the target language beyond the walls of the classroom for all, which can lead to increased proficiency overall, as highlighted at the start of this paper.

8 Acknowledgment

The statistical analyses were calculated using SPSS with a license from Universidad de Valencia.

9 References


10 Authors

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Appendix 1

Questionnaire on the Facebook© and Skype© interaction activities

1. I had used Facebook© before this semester (in any language)/Había utilizado Facebook© antes de este cuatrimestre (en cualquier idioma) Yes/Sí No/No / I I use Facebook© on a regular basis/Utilizo Facebook© de forma rutinaria.

2. I had used Skype© or a similar program before this semester (in any language)/Había utilizado el programa de Skype© u otro parecido antes de este cuatrimestre (en cualquier idioma). Yes/Si No/No

3. Before this semester started, how much experience did you have speaking the foreign language? Select one response/Antes del comienzo del cuatrimestre, ¿cuánto habías hablado el idioma extranjero? Elige una respuesta.
   - I had never spoken the foreign language at any time./No lo había hablado nunca.
   - I had only spoken it a little bit in class./Sólo lo había hablado un poquito en clase.
   - I had spoken it outside class some./Lo había hablado algo fuera de clase.
   - I had used it often./Lo había hablado mucho.

Now answer the following questions on a scale of 1 -5; 1 is the lowest level of agreement and 5 is the highest level of agreement. Circle the most appropriate number for your opinion./Ahora contesta a las siguientes preguntas según una escala de 1 a 5. Indica 1 para el mayor grado de desacuerdo y 5 para el mayor grado de acuerdo. Selecciona el número más acorde con tu opinión.

<table>
<thead>
<tr>
<th>Question</th>
<th>Totally disagree/ Nada de acuerdo</th>
<th>Disagree/ No estoy de acuerdo</th>
<th>Neither agree nor disagree/ Ni de acuerdo, ni en desacuerdo</th>
<th>Agree/ De acuerdo</th>
<th>Highly agree/ Totalmente de acuerdo</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. I liked the Skype activity/Me gustó la actividad en Skype.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. The activity on Skype was difficult for me to do./La actividad Skype me resultará difícil de hacer.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. I didn’t know what to talk about with my partner on Skype/No sabía de qué hablar con mi pareja en Skype.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14. More guidance from the teacher at the start would have made the Skype activity easier to do./Más ayuda de la profesora al principio hubiese facilitado la realización de la actividad en Skype.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16. I was able to explain things about my</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
native language to my partner when we Skyped. / Fui capaz de explicar cosas acerca de mi idioma nativa a mi pareja cuando hablamos por Skype.

17. My level of the foreign language increased thanks to the Skype activity this semester/Mi nivel en el idioma extranjero mejoró este cuatrimestre gracias a la actividad de Skype.

18. I have a better understanding of the other country’s culture and lifestyle thanks to these activities. / Entiendo mejor la cultura y vida en el otro país gracias a estas actividades.

### Appendix 2. Summary of numerical results

#### Table 1. Prior use (semesters 1-2) or regular use (semester 3) of Facebook© in percentages

<table>
<thead>
<tr>
<th>Country</th>
<th>Fall 2015</th>
<th>Spring 2016</th>
<th>Fall 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spain</td>
<td>91.7 (N=24)</td>
<td>75.5 (N=49)</td>
<td>58.8 (N=51)</td>
</tr>
<tr>
<td>USA</td>
<td>96.2 (N=26)</td>
<td>95.8 (N=24)</td>
<td>95.5 (N=22)</td>
</tr>
</tbody>
</table>

#### Table 2. Prior use of Skype© in percentages

<table>
<thead>
<tr>
<th>Country</th>
<th>Fall 2015</th>
<th>Spring 2016</th>
<th>Fall 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spain</td>
<td>95.8 (N=24)</td>
<td>81.6 (N=49)</td>
<td>76.5 (N=51)</td>
</tr>
<tr>
<td>USA</td>
<td>84.6 (N=26)</td>
<td>79.2 (N=24)</td>
<td>72.7 (N=22)</td>
</tr>
</tbody>
</table>

#### Table 3. “I liked the Facebook© activity” in values up to 5

<table>
<thead>
<tr>
<th>Country</th>
<th>Fall 2015</th>
<th>Spring 2016</th>
<th>Fall 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spain</td>
<td>3.67 (N=24)</td>
<td>3.84 (N=49)</td>
<td>3.94 (N=51)</td>
</tr>
<tr>
<td>USA</td>
<td>3.79 (N=24)</td>
<td>4.22 (N=23)</td>
<td>4.18 (N=22)</td>
</tr>
</tbody>
</table>

#### Table 4. “I liked the Skype© activity” in values up to 5

<table>
<thead>
<tr>
<th>Country</th>
<th>Fall 2015</th>
<th>Spring 2016</th>
<th>Fall 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spain</td>
<td>3.50 (N=22)</td>
<td>4.22 (N=49)</td>
<td>4.36 (N=50)</td>
</tr>
<tr>
<td>USA</td>
<td>3.38 (N=21)</td>
<td>4.52 (N=23)</td>
<td>4.45 (N=22)</td>
</tr>
</tbody>
</table>

#### Table 5. “Before this semester, how much experience did you have speaking the foreign language?” in percentages

<table>
<thead>
<tr>
<th>Country</th>
<th>Fall 2015</th>
<th>Spring 2016</th>
<th>Fall 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spain</td>
<td>None</td>
<td>In class</td>
<td>Some outside class</td>
</tr>
<tr>
<td></td>
<td>4.2</td>
<td>16.7</td>
<td>41.7</td>
</tr>
<tr>
<td>USA</td>
<td>0</td>
<td>50.8</td>
<td>46.2</td>
</tr>
</tbody>
</table>
Table 6. “My level of the language increased thanks to the Facebook(c) and Skype(c) activities” in values up to 5.

<table>
<thead>
<tr>
<th>Country</th>
<th>Fall 2015</th>
<th>Spring 2016</th>
<th>Fall 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spain</td>
<td>3.38 (N=24)</td>
<td>3.45 (N=49)</td>
<td>3.65 (N=51)</td>
</tr>
<tr>
<td>USA</td>
<td>3.48 (N=23)</td>
<td>4.61 (N=23)</td>
<td>4.32 (N=22)</td>
</tr>
</tbody>
</table>

Table 7. “I have a better understanding of the other country’s culture and lifestyle thanks to these activities” in values up to 5

<table>
<thead>
<tr>
<th>Country</th>
<th>Fall 2015</th>
<th>Spring 2016</th>
<th>Fall 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spain</td>
<td>3.79 (N=24)</td>
<td>4.00 (N=49)</td>
<td>4.14 (N=51)</td>
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<td>USA</td>
<td>4.09 (N=23)</td>
<td>4.78 (N=23)</td>
<td>4.59 (N=22)</td>
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</tbody>
</table>

Table 8. “I was able to explain things about my native language to my partner when we Skyped” in values up to 5

<table>
<thead>
<tr>
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<th>Fall 2015</th>
<th>Spring 2016</th>
<th>Fall 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spain</td>
<td>3.75 (N=20)</td>
<td>4.00 (N=49)</td>
<td>3.62 (N=50)</td>
</tr>
<tr>
<td>USA</td>
<td>4.00 (N=20)</td>
<td>4.39 (N=23)</td>
<td>4.00 (N=22)</td>
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</table>

Table 9. “I didn’t know what to talk about with my partner on Skype©” in values up to 5

<table>
<thead>
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<th>Country</th>
<th>Fall 2015</th>
<th>Spring 2016</th>
<th>Fall 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spain</td>
<td>3.16 (N=19)</td>
<td>2.24 (N=49)</td>
<td>2.41 (N=51)</td>
</tr>
<tr>
<td>USA</td>
<td>2.39 (N=18)</td>
<td>2.30 (N=23)</td>
<td>2.64 (N=22)</td>
</tr>
</tbody>
</table>

Table 10. “The activities on Facebook© and Skype© were difficult for me to do” in values up to 5

<table>
<thead>
<tr>
<th>Country</th>
<th>Fall 2015</th>
<th>Spring 2016</th>
<th>Fall 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spain</td>
<td>2.00 (N=24)</td>
<td>1.67 (N=48)</td>
<td>1.98 (N=51)</td>
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<tr>
<td>USA</td>
<td>2.45 (N=20)</td>
<td>2.65 (N=23)</td>
<td>2.50 (N=22)</td>
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</tbody>
</table>

Table 11. “My partner on Skype helped me when I had difficulties using his/her native language” in values up to 5

<table>
<thead>
<tr>
<th>Country</th>
<th>Fall 2015</th>
<th>Spring 2016</th>
<th>Fall 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spain</td>
<td>3.50 (N=20)</td>
<td>3.75 (N=49)</td>
<td>3.80 (N=51)</td>
</tr>
<tr>
<td>USA</td>
<td>3.90 (N=20)</td>
<td>4.48 (N=23)</td>
<td>4.09 (N=22)</td>
</tr>
</tbody>
</table>

Table 12. “More guidance from the teacher at the start would have made the Skype© activity easier to do” in values up to 5

<table>
<thead>
<tr>
<th>Country</th>
<th>Fall 2015</th>
<th>Spring 2016</th>
<th>Fall 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spain</td>
<td>2.45 (N=20)</td>
<td>2.08 (N=49)</td>
<td>2.02 (N=51)</td>
</tr>
<tr>
<td>USA</td>
<td>2.75 (N=23)</td>
<td>2.35 (N=23)</td>
<td>2.64 (N=22)</td>
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</tbody>
</table>