The use of virtual exchanges to teach pragmatics and phonetics

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Abstract

This article describes the use of a virtual exchange project to teach undergraduate students in two upper-level Spanish linguistics courses, one focused on pragmatics and the other on phonetics. The adoption of virtual exchanges to teach about linguistic concepts is unique since previous research focuses mainly on increased linguistic and intercultural skills. Previous research on the teaching and learning of pragmatics and phonetics offers suggestions and ideas that align with the project presented in the article. The pedagogical approach used in the current study aligns with Learning by Design, a project-based inquiry approach to learning. Students in both courses participated in two 30–45-minute virtual conversations with Spanish-speaking peers at two different universities. Following each conversation, students completed a written assignment designed not only to reflect on the conversation but also to review and apply linguistic concepts learned in each course. Open-ended responses from a survey completed by students were analyzed for themes. The findings indicate the comfort level with the language that the virtual format allowed, growth in the target language, and the ability to utilize and practice the concepts learned in the course in the conversations in the virtual-exchange assignments.

Keywords   Virtual exchanges, teaching linguistics, teaching Spanish, teaching pragmatics, teaching phonetics

1. Introduction

Virtual exchanges have been used to practice and improve language and intercultural skills (Rienties, Lewis, O'Dowd, Rets, & Rogaten, 2020). This includes pragmatic skills. For example, virtual exchanges resulted in increased pragmatic awareness of compliment responses by L2 English learners in Poland who engaged in a series of virtual conversations with English teacher candidates in the USA (Hilliker, Lenkaitis, & Loranc-Paszylk 2021; Loranc, Hilliker, & Lenkaitis, 2022). The current article addresses how two and three-way virtual exchanges can be used with university students taking Hispanic Linguistics courses to teach about concepts related to linguistics. In this case, assignments were developed and utilized in a course focused on the phonetics, phonology, and dialectology of Spanish-speaking regions, referred to from here forward as the 'phonetics course', and also in a course focused on Spanish pragmatics, referred to from here forward as the

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'pragmatics course'. Both courses were taught in Spanish at a large public university in Western Canada. Linguistics courses taught in the target language, for example in French, German or Spanish are common in language programs across Canada and the USA (VanPatten, 2015). Despite this, Hiramatsu and Martinez (2021) indicate that research on the Scholarship of Teaching and Learning in linguistics is scarce. Only 58 articles were published in University Innovations in Linguistics Education by the Indiana University Linguistics Club in the 10 issues published since 1979, of which half pertain to instructional methods or teaching materials (Bunger, 2017).

In the remaining subsections of this introduction a definition of virtual exchanges is provided, along with a brief review of research on virtual exchanges in language classrooms. Since the exchanges were implemented in specific upper-level Spanish linguistics courses, the research on the teaching and learning of the topics of these courses is presented in the next subsection, starting with pragmatics and followed by pronunciation and phonetics. Then, the pedagogical approach is explained, and the research questions are presented.

1.1. Virtual exchanges

Virtual exchanges are defined as "student-centred, international, and collaborative approaches to learning where knowledge and understanding are constructed through interaction and negotiation with students from other cultures" (Baroni et al. 2019, p. 8-9). The benefits of such exchanges are plentiful and include increased intercultural communicative competence (Belz & Thorne, 2006) and socio-pragmatic competence (Chun, 2011). O'Dowd (2021) notes that although virtual exchanges have occurred for the past 27 years, they were largely "a peripheral activity" up until around six years ago (p. 213). To be effective, they must be integrated into the course (O'Dowd, 2021). Recent research indicates the popularity of virtual exchanges with students, particularly as they gain cultural knowledge through carefully planned tasks (O'Dowd, 2021). In addition to linguistic growth, students also reported learning soft skills, including, but not limited to, digital and collaborative skills (O'Dowd, 2021). Notwithstanding the time and effort it takes to implement virtual exchanges, teachers also benefit through the relationships they develop with the other teachers involved in the exchanges (O'Dowd, 2021).

Most prior research on virtual exchanges has described how to implement them and described gains in intercultural competence or language skills (Rienties et al., 2020). Virtual exchanges have been used to train future English teachers, connecting students in 34 countries (Baroni et al., 2019). Prior research has focused more on interactional language learning and gains in intercultural competence as opposed to the explicit learning of linguistic concepts. An exception is the learning of compliment responses by L2 learners of English who engaged in virtual exchanges with future TESOL teachers (Hilliker et al. 2021; Loranc et al., 2022). An additional exception is a telecollaboration project among students in a Spanish for Heritage Speakers course at three universities in the USA whose courses were designed around the virtual collaboration (Villa & Barros García, 2022). In contrast, in the current study the virtual exchanges and accompanying written assignments

were part of three different courses taught at three different universities and were incorporated into each course after the course was designed, as opposed to designing the course around the virtual exchanges.

1.2.   *The teaching and learning of pragmatics*

The teaching and learning of pragmatics is not a new topic, especially in Spanish, given the textbooks available for teaching university learners which include Félix-Brasdefer (2018) and Placencia and Padilla (2020). Designed for training teachers on pragmatics instruction in the language classroom, Ishihara and Cohen's (2021) book also includes a chapter on learner strategies. These strategies include various ways to analyze speech acts including their magnitude and characteristics of the speakers involved in the act, and also includes a comparison of speech acts across cultures (Cohen 2021, p. 225). Furthermore, Cohen (2021) suggests several ways for learners to practice speech acts, which include both imaginary interactions and real-world service-encounters. The activity described in this chapter is one such way for students to practice and compare speech acts and other pragmatic phenomena. In Hilliker et al. (2021) and Loranc et al. (2022), the exchanges benefitted L2 English learners in Poland who were able to increase their pragmatic awareness of compliment responses while conversing with future TESOL teachers whereas in the current study learners of Spanish benefit from speaking Spanish with each other during the virtual exchanges while discussing topics related to pragmatics.

1.3.   *The teaching and learning of pronunciation and phonetics*

There are many ways in which pronunciation has been taught in Spanish language courses and in general, pronunciation instruction has proven beneficial to learners (Rao, 2019). However, "direct classroom research is scant" and previous studies have primarily focused on how dialectal variants have been acquired in the classroom or abroad (Zárate-Sández, 2019, p. 207). Students in Finland, France and Spain perceived the use of phonetic notation in their English courses as a way to raise awareness towards the pronunciation of sounds (Mompeán, 2015). Lord (2019) presented three ways to teach computer-assisted phonetics in a Spanish phonetics classroom at the university level. This included the use of visualization tools to teach segmental production, the use of social media by the instructor to share videos with the targeted sounds for students to analyze, and the use of student-produced group podcasts. The activity described in this chapter is another way to practice using phonetic annotation to highlight phonetic phenomena that occur in the virtual exchanges.

Within the teaching of phonetics, the use of authentic materials stems from "songs, websites, TV and radio programmes, students' self-recordings" and such use may increase in the future (Mompeán, Ashby, & Fraser, 2011). These authentic materials did not include the use of virtual exchanges in phonetics courses. Boomershine and Ronquest (2019) suggest activities that could be useful for teaching heritage learners about certain aspects of phonetics which include analyzing their own speech and speech samples from a variety of Spanish-speaking regions. This most closely resembles the activities presented in this article.

1.4.   Learning by Design

The above research presents ideas for teaching pragmatics and phonetics but leaves out the pedagogical approach. The current study aligns with the concept of Learning by Design, a reflexive pedagogy that is an "epistemological theory of learning...what we do and make...a series of knowledge actions, using multimodal media to externalize our thinking" (Cope & Kalantzis 2015, p. 32). It stems from a pedagogy of multiliteracies and includes the learner and their experiences as a resource for learning that connects students' backgrounds and previous knowledge to the curriculum (Zapata, 2022). Kalantzis, Cope, and the Learning by Design Project Group (2005) describe the two conditions necessary for learning to take place – belonging and transformation. Zapata (2022) explains that this includes informal learning. Cope and Kalantzis (2015) reconceptualized the multiliteracies pedagogy into Learning by Design. This type of learning is social and collaborative and takes into account learner differences (Cope & Kalantzis, 2015). In this pedagogy, students experience the knowledge processes explained in Table 1, not necessarily in the order presented in the table. The processes include *experiencing,* which involves relating what students know to the content of the course in order to teach new material; *conceptualizing,* which is when students develop concepts and theories; *changing* which is transforming "tacit information into explicit knowledge"; *analyzing,* which involves interpreting; and *applying,* which involves using knowledge obtained in the real world (Zapata 2022: 17). This pedagogy connects well with experiential learning, which in short is learning by doing (Knutsen, 2003). It is "...defined by the inclusion of phases of reflection designed to help the learner relate a current learning experience to past and future experience" (Knutsen, 2003, p. 52). The experiential approach implemented in the current study is the use of virtual exchanges and accompanying written assignments which target pragmatic and phonetic concepts as well as reflections about language use.

Table 1

Learning by Design as Applied to Two Courses

Knowledge Process	Definition (Taken directly from https://newlearningonline.com /learning-by-design/pedagogy)	Phonetics	Pragmatics
1. Experience the known	learners reflect on their own familiar experiences, interests and perspectives	sounds they make in Spanish	language use in context
2. Experience the new	learners observe or take part in something that is unfamiliar; they are immersed in new situations or contents.	sounds of others (i.e. other dialects) speaking Spanish	language use in context by others
3. Conceptualize by naming	learners group things into categories, apply classifying terms and define these terms	identifying phonemes and allophones	identifying speech acts used and parts of speech acts

4. Conceptualize by theory	learners make generalisations using concepts and connect terms in concept maps or theories	describing changes that occur due to phonological rules	describing how pragmatic phenomena employed fit into different theories
5. Analyze functionally	learners analyse logical connections, cause and effect, structure and function	comparing the sounds of different speakers	comparing responses to speech act scenarios
6. Analyze critically	learners evaluate their own and other people's perspectives, interests and motives	comparing phonetically diverse dialectal features	comparing speech acts in different dialects
7. Apply appropriately	learners apply new learning to real world situations and test their validity	using sounds in speech and identifying the dialects of others based on regional sounds employed	using the speech acts in future conversations
8. Apply creatively	learners make an intervention in the world which is innovative and creative, or transfer their learning to a different context	inventing examples	inventing examples

1.5   Research questions

In the current study, learners reflect on the language and sounds used in the virtual exchanges to utilize the terms and concepts studied in two linguistics courses. The written assignments accompanying each virtual conversation allow for students to reflect on both past and future experiences.

Given the fact that previous research on virtual exchanges has focused minimally on their use in linguistics courses, the research questions for the current study are as follows: How can virtual exchanges be used to teach about pragmatics and phonetics in upper-level Spanish linguistics courses following a Learning by Design pedagogy? How do students benefit from such exchanges in terms of learning about the linguistic material?

2. Methodology

The two courses in which the virtual exchanges took place were both upper-level linguistics courses taught in Spanish. Each course was taught virtually in a synchronous manner, however virtual exchanges can form a part of face-to-face courses too, as previously utilized by the author in other courses. In the current study, the virtual exchanges were completed outside of class time at the convenience of the students. The written activities that accompanied each conversation were in Spanish and students wrote in Spanish to complete the assignments.

2.1.   Fall 2020 phonetics course

The Fall 2020 course consisted of an introduction to the sounds of Spanish including regional variation of such sounds. The main textbook used was Morgan (2010). There were 25 students enrolled in the course, of whom seven were heritage or first-language speakers of Spanish. In this course, students were given credit (10% of the final course grade) for participating in two three-way virtual conversations and completing a written assignment individually following each conversation. Each group contained at least one student from each of the three universities, which included a large public university in Western Canada, a small private liberal arts college on the East Coast of the USA and a small-private liberal arts college in the Southwest of the USA. The conversations lasted around 45 minutes, with some groups extending theirs to 60 minutes. Both conversations occurred outside of class time, with the first conversation scheduled around week 5 of the semester and the second during weeks 8-10.

The topics addressed in both conversations included themes that would be easy for students to engage in with little to no preparation outside of class time and also related to the course content at the two other universities. During the virtual exchanges, after the students introduced themselves, they delved into a variety of topics including language use, linguistic discrimination, the future of the use of Spanish in Canada and the USA, cultural heritage, connections to Spanish-speaking places and speakers, comparing communities, and discussing the regions in which each student lives and attends university.

Then after each conversation, students were instructed to watch the video recording of their conversations and complete a written assignment individually. In the first assignment, students identified ten words stated at any point during the conversation by any speaker and divided each of these words into syllables. Then, for each word, they identified the tonic syllable, type of word, and if the word was pronounced according to standard Spanish. The also wrote a minimal pair for the word. Following this, students listed five phrases and divided the phrases into syllables to practice with the concept of re-syllabification in Spanish. At the end of this assignment, students responded to questions that encouraged them to reflect on their performance in the conversation, stating what they did well and what they could improve upon. For the assignment after the second conversation, students identified words used in the conversation that contained the allophone provided and then phonetically transcribed the word. They also identified a word or phrase used in the conversation and phonetically transcribed it in two different regional Spanish dialects to review dialectal differences in sounds. This assignment provided students with practice identifying allophones and writing phonetic transcriptions using the International Phonetic Alphabet.

2.2.   Winter 2021 pragmatics course

The second course consisted of a Winter 2021 Introduction to Spanish Pragmatics course taught entirely in Spanish. The main textbooks used were Félix-Brasdefer (2018) and Placencia and Padilla (2020). There were 19 students enrolled in the course, of whom 11 were heritage or first-language speakers of Spanish. In this course, students were given credit (10% of their

final grade) for participating in two 30-45-minute two-way virtual conversation with students from a small private liberal arts university on the East Coast of the USA, and for individually completing two written assignments following each conversation.

The first conversation took place during weeks 6-8 of the semester, depending on the students' schedules. The students were instructed to try to speak in Spanish and to introduce themselves by providing basic information such as their major/minor, their year in the university, their hobbies and pastimes, and their experiences learning Spanish. They then discussed the languages they used in various contexts and described the region in which they lived. Next, to practice concepts taught in the pragmatics course, students were provided with a series of scenarios based on four different speech acts. These consisted of three requests, four refusals, four compliments, and three excuses. The students then discussed how they would respond to the scenarios and compared their answers to each other.

The written assignment that students completed individually after this first conversation included questions in which students identified the power relations, social distance, and relationships found between the participants as well as the sociocultural context. Then, they identified a constatative utterance and a performative utterance they heard during the conversation. If one was not employed, they invented one. Following this, they identified the locutionary, illocutionary, and perlocutionary acts in one of the scenarios discussed in the conversation. Then they chose another scenario and identified the head act and supportive moves, comparing these to the ones used in a different scenario. Then students responded to specific questions about each speech act. For the request scenarios, students identified the type of request used, direct or indirect. For the refusal scenarios, students identified the type of internal modification used and if none was used, they invented one. For the compliments, students compared a direct or explicit compliment to an indirect or implicit one while describing the structure used for the explicit one. For the implicit one, they described whether it followed one of the four conventions used. For the excuses, they compared their group member's responses to the three excuses they provided. Students then identified a deictic expression used in the conversation along with identifying the type of deixis employed. Finally, students wrote a short reflection on the conversation from a pragmatics point of view using at least five terms they had learned in the course.

The second conversation took place about three weeks after the first conversation, again depending on the students' schedules. In this conversation, half of the topics were related to pragmatics and the other half were related to sociolinguistics in order to address the objectives of the course at the other university. The topics related to pragmatics included questions about forms of address, vocatives, and the meaning of the word *ahorita* (right now). The topics related to sociolinguistics were about linguistic accommodation, attitudes toward Spanish in the region in which each participant lived, attitudes towards mixing Spanish with other languages, linguistic discrimination, linguistic ideologies, and cultural heritage.

2.3   Data analysis

Ethics approval was obtained to survey students at the beginning and end of the semester and to use their video recordings from the exchanges. The survey consisted of demographic questions; a series of statements about willingness and comfort level using Spanish; statements on the extent to which the virtual exchanges improved writing, reading, listening, and speaking skills along with cultural knowledge; and open-ended responses explaining those statements and reflecting on positive and negative aspects of the virtual conversations, and whether they would participate in a similar activity in the future. The data stems from the open-ended responses of the survey. The response rate was 20% for the phonetics course and 16% for the pragmatics course, which is close to the 20-25% recommended response rate for sample sizes under 500 (Wu, Zhao, & Fils-Aime, 2022). Following Saldaña (2013), in the first stage of qualitative analysis, descriptive coding was used to analyze the open-ended responses. These codes consisted of language skills and feelings surrounding the virtual exchanges. The codes were then analyzed for themes in the second stage of the qualitative analysis. Two researchers were sent the codes and themes and indicated agreement on 95% of them. The remaining 5% were discussed until consensus was met.

3. Findings

After analyzing the coded open-ended responses, three common themes were identified across both courses. These included the comfort level with the language that the virtual format allowed, growth in the target language and utilizing concepts learned in the course in the conversations. Each theme will be discussed in more detail.

The first common theme found in the survey responses was the comfort level that the virtual format provided. For example, one student in the phonetics course commented that they "felt more comfortable practicing my Spanish through Zoom" indicating the comfort they felt in a virtual second language learning environment. A student in the pragmatics course mentioned that although they were "nervous to have to have a conversation with [their] fellow classmates and another person who [they] didn't know", they appreciated learning about the new student and "hearing her accent as well as her experience with the language", even adding that it was "refreshing to be able to practice [Spanish]".

The next theme pertained to growth in the language, also due to the virtual format. Exemplifying this, one student in the phonetics course attributed the Zoom format to their "growing confidence in the language". Another student in the pragmatics course wrote that "[i]t was also good practice for me for speaking, something I don't do often enough." That same student also wrote, "I appreciated a chance to see the differences between me, an English speaker and a native Spanish speaker, and an inheritance speaker", noting the differences between the different speakers in her group, which could be indicative of growth in sociocultural and sociolinguistic competence. A student in the pragmatics course wrote, "I had to listen over and over to the recording and I found that [my] capacity to understand the native speaker improved with that repetition". This also relates to the first theme. The fact that the conversations were recorded over Zoom allowed students the opportunity to

go back and listen to complete the written assignment. It also allowed students to hear an accent they may not have been familiar with, given the fact that students were from various heritages and backgrounds, speaking different regional dialects of Spanish. However, this can also occur through other contexts that do not involve virtual conversations.

The final theme was related to Learning by Design and having a space to practice and use the concepts learned in the course. One student in the phonetics course admitted that the "transcription task was very challenging" and appreciated having a context within which to practice it. Another student in the phonetics course commented on the "good amount of different medias to better explain the content", which is a key component of Learning by Design. In the pragmatics course, one student linked the course content to actual use, expressing that they "really enjoyed participating in these two conversations as they gave [them] an opportunity to use pragmatic terms that [they] learned in class in a more everyday setting". This is a key component of Learning by Design, where students not only analyze but, also apply the content used (Cope & Kalantzis, 2015).

4. Discussion

The three themes that arose demonstrate not only appreciation of the virtual format for the conversation exchanges, but also expanded language skills. The current study resulted in findings that indicated that the exchanges and their accompanying written assignments helped students learn and practice linguistic concepts, unlike in previous research that demonstrated increased language skills or intercultural competence (e.g., Rienties et al., 2020). This is in line with Baroni et al. (2019, p. 25), who found that future English teachers "learned a lot" from the virtual exchanges and would welcome a similar assignment in other teacher education courses. This type of experiential learning and Learning by Design appeared to be an effective way to connect students to the course material in an engaging manner.

In addition, Table 1 shows how the virtual exchanges and accompanying written assignments align with Learning by Design for both courses. Throughout both courses, students were exposed to multimedia resources in order to learn and review linguistic concepts prior to engaging in the virtual conversations. Using the concepts in their virtual exchanges and accompanying written assignments helped students experience, conceptualize, analyze, and apply their knowledge of phonetics and pragmatics to their Spanish.

The limitations of the study include the limited number of students who completed the survey. Nevertheless, their answers made evident the learning that occurred and the effectiveness of the assignment. 100% of the students who completed the survey said they would partake in a similar exchange in the future. One aspect to consider is the time commitment on the part of the students, since the virtual conversations occurred outside of class time. This was also listed as an issue in Baroni et al.'s (2019) study with future English teachers, although this included a larger range of time zones. An alternative could be to make the conversations asynchronous, but this would likely also affect the students' growth in the language since it takes away the interactive and spontaneous manner a synchronous virtual exchange provides. Students

must be made aware of the out-of-class commitment at the beginning of the course.

5. Conclusions

While research on the teaching and learning of linguistics remains limited, this article focuses on how virtual exchanges can be used to teach and practice linguistic concepts, in a way that not only builds on students' linguistic knowledge, but also aids in their language acquisition. Overall, students found this type of assignment more engaging than traditional methods used to teach linguistic concepts.

Future studies could also include interviews and focus groups with students to determine how virtual exchanges can help students experience, conceptualize, analyze, and apply their knowledge. A future iteration of the virtual exchanges could have students more involved, in terms of both creating the topics for the virtual exchange as well as the written assignment. For example, in the pragmatics course, students could create the scenarios for the speech acts and then share them with their group instead of the instructors creating them. Finally, a future empirical study could contain a control group with no virtual exchanges in order to determine the impact of virtual exchanges on linguistics learning.

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