

Intercultural competence development via service-learning in Spanish for the professions*

Desarrollo de la competencia intercultural mediante el aprendizaje-servicio en español con fines profesionales

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Abstract

With an overview of the concept of service-learning in Spanish-language courses, this article will examine the following four principal areas to help educators prepare individuals for effective intercultural communication in their prospective fields: (1) role of intercultural competence development across disciplines and in service-learning programs, (2) interdisciplinary approaches to service-learning program development, (3) connect two types of learners (heritage and foreign language learners) in Spanish for the Professions courses to linguistic and ethnic minority challenges to seek solutions to growing disparities across professional contexts through active classroom-to-community connections, and (4) empirically examine the benefits of service-learning with a primary focus on heritage language learners in two university courses (Spanish Interpretation and Translation) that involve the establishment of diverse global and local community partnerships that bridge the classroom with the community and seek to eradicate disparities. Results suggested that students ($N = 19$) in the service-learning programs thought these programs positively affected intercultural competence and linguistic skills development. Study limitations are explored with suggestions for future research.

Key Words: Spanish heritage speakers, intercultural competence, service-learning, professional contexts.

Resumen

Con un resumen del concepto de aprendizaje-servicio en los cursos de la lengua española, este artículo examina las siguientes cuatro áreas principales para ayudar a los educadores preparar a los individuos en la comunicación intercultural efectiva en sus campos futuros: (1) el papel del desarrollo de la competencia intercultural entre las disciplinas en los programas de aprendizaje-servicio, (2) las aproximaciones interdisciplinarias al desarrollo del programa de aprendizaje-servicio, (3) conectar dos tipos de principiantes (hablantes de herencia y de lenguas extranjeras) en los cursos de español con fines específicos con los desafíos lingüísticos y étnicos para buscar soluciones a las disparidades crecientes en los contextos profesionales a través de conexiones activas del aula a la comunidad y (4) examinar empíricamente los beneficios del aprendizaje-servicio con un enfoque primario en los principiantes de hablante de herencia en dos cursos universitarios (Interpretación y Traducción del Español) que suponen el establecimiento de diversos convenios comunitarios globales y locales que conectan el aula con la comunidad e intentan erradicar las disparidades. Los resultados sugirieron que los estudiantes ($N = 19$) en los programas de aprendizaje-servicio pensaron que estos programas afectaron positivamente el desarrollo de la competencia intercultural y las destrezas lingüísticas. Se exploran las limitaciones del estudio con sugerencias para investigaciones futuras.

Palabras Clave: Hablantes de español como lengua de herencia, competencia intercultural, aprendizaje-servicio, contextos profesionales.

INTRODUCTION

By the year 2050, it is predicted that the United States could be the largest Spanish-speaking nation in the world, with, according to the U.S. Census Office, roughly 138 million speakers of Spanish (Pérez, 2015). Nevertheless, as a result of a lack of effective communicative competence and cultural cognizance, linguistic minority disparities in medical care, legal counsel, and other areas continue to stretch across the globe. Hence, our increasingly globally diverse communities necessitate linguistic and cultural skill development across professional contexts. From rural to urban communities throughout the nation, there is an undeniable growing demand for bilingual and culturally competent professionals that can provide equitable services in a variety of fields and capacities including (but not limited to) medical, legal, academic, and engineering sectors. Within each of these diverse professional contexts, cross-cultural communication is essential and requires intercultural competence development.

Although overlooked as an urgent pedagogical issue in Spanish-language courses, intercultural competence development plays a fundamental role in medical (Frey, Powell & Gott, 2016), legal (Nader, 2011), and engineering (Yu, 2012) contexts. Although the use of this concept varies by discipline, its underlying principle can be broadly outlined as the effective application or utilization of language and cultural skills in diverse interactions. There are three critical dimensions of intercultural competence that involve a cyclical relationship and include affect, behavior, and

cognition (Spitzberg & Changnon, 2009). Specifically, an individual's affect (or attitudes) influence cognition (or understanding and skill development) and, as a consequence, impact how an individual behaves (or interacts) in a particular setting. In diverse professional contexts, for instance, each interaction between individuals involves the realization of cultural and linguistic knowledge via practical application of skills and knowledge.

Thus, in Spanish-language courses, intercultural competence development must be included in program development as a critical lifelong learning skill through the implementation of service-learning. As an active learning strategy, service-learning courses allow learners to connect course content to practice while serving linguistic minorities and local or global organizations in need. The challenges, however, that many educators of Spanish-language courses face are designing and implementing methodological approaches to service-learning within an intercultural competence development framework.

Therefore, with an overview of the concept of service-learning in Spanish-language courses, this article will examine the following four principal areas to help educators prepare individuals for effective cross-cultural communication in their prospective fields: (1) role of intercultural competence development in cross-cultural communication across disciplines and in service-learning programs, (2) interdisciplinary approaches to service-learning program development in higher education, (3) connecting heritage, native, and foreign language learners in Spanish for the Professions courses to linguistic and ethnic minority challenges to seek solutions to growing disparities across professional contexts through active classroom-to-community connections, and (4) empirically examine the benefits of service-learning with a primary focus on heritage language learners in two courses (Introduction to Spanish Interpretation and Introduction to Spanish Translation) that involve the establishment of global and local community partnerships that bridge the classroom with the community and seek to eradicate disparities. This research study addresses the urgency to address challenges faced in our globally changing landscape through meaningful learning experiences using innovative service-learning pedagogical approaches. The subsequent section provides a synthesis of critical research in intercultural competence development and interdisciplinary approaches to service-learning programs.

1. Literature review

1.1. Intercultural competence development

Intercultural competence development plays a vital role across fields including (but not limited to) medicine (Bein, 2017), law (Healey, 2018), and engineering (Merfeld-Langston & Elmore, 2017). As an essential lifelong learning skill in diverse disciplines

and contexts, intercultural competence has been defined in various ways to adapt and connect it to specific fields. For example, in medical contexts, intercultural competence plays a leading role in effective interaction between medical providers and patients that includes critically examining patients' medical backgrounds, treatment options, and individual perspectives on medical care and decision-making. As a critical element across disciplines, intercultural competence development is also undoubtedly equally important among all language learners and language learning contexts.

Although defining the concept of heritage language learners is not within the scope of this research analysis, it is necessary to briefly outline how the concept is used in this study in relation to language learning contexts. Described in numerous ways (Polinsky & Kagan, 2007; Ruggiero, 2017), the concept of heritage language learners cannot simply be limited or generalized to all speakers of a particular language. Hence, one definition does not necessarily consider the diversity of heritage speakers with respect to an individual's cultural background knowledge and varied proficiency levels. Thus, the concept will be broadly used in this research study in reference to individuals that speak Spanish at home without delineating specific proficiency levels, background experiences or isolating learners' ties to a particular social or cultural identity.

No matter the language learner, intercultural competence is a key ingredient in language learning. Broadly, intercultural competence refers to effectively navigating and communicating in diverse interactions through a cyclical relationship between affect, behavior, and cognition (Spitzberg & Changnon, 2009). That is, an individual's motivation or attitude comprises the affective dimension and can impact cognition or what an individual learns. As a result, these two dimensions can affect how an individual behaves or, simply, how one applies knowledge or skills in a particular interaction. Depending on pedagogical design and frameworks, mixed-language classrooms may appear to allow for increased language and cultural exchanges between heritage, native, and foreign language learners, but can achieve this only to a certain degree. Developing intercultural competence and applying coursework directly to community issues and collaborating with diverse individuals in professional contexts cannot be recreated in the classroom.

Despite the fact that intercultural competence development is recognized as a critical element in language learning (Chui & Dias, 2017; Wagner, Perugini & Byram, 2017), Kagan (2012) notes that not much attention is paid to "the intercultural side of heritage language learners' circumstances either within or outside of the classroom" (Kagan, 2012: 72). Each heritage language learner enters the language classroom with unique needs and interests that must form integral components of an educator's methodologies in order to facilitate learning. For instance, this author notes that an individual that experiences embarrassment (which constitutes the affective dimension) as a result of various factors (e.g., lack of motivation, perceived inadequate language

skills, instructional practices, etc.) can impede learning or result in ‘cognitive dissonance’ (Kagan, 2012). Drawing upon learners’ previous knowledge, linguistic backgrounds, and language varieties can support diverse learner perspectives, which can also enable all members of the classroom to equally collaborate and strengthen linguistic knowledge as global lifelong learners.

1.2. Interdisciplinary approaches to service-learning program development and connecting learners

A challenge faced by educators across the globe is connecting language learning to two intersecting constructs: (1) the community and (2) at the interdisciplinary level. These constructs do indeed intersect in that the community challenges learners’ abilities to perform and apply professional skills in a variety of contexts. From challenging learners’ thoughts on language in the community and professions to examining the impactful effect of their work, service-learning offers learners opportunities to critically examine how their perspectives and academic studies can transform a community.

Although service-learning programs may seem to easily make these connections accessible to learners, strategic development and implementation are critical pedagogical components that can affect learner attitudes and motivation in both language learning and service-learning. Moreover, these essential pedagogical aspects can also foster individual learner connections of course topics to the community and promote meaningful connections between heritage language learners and the community. Specifically, Valdés (2014) asserts that among the many challenges educators face is constructing a pedagogy that “capitalizes on personal connections to the heritage language” (Valdés, 2014: 27), examining heritage language learners’ linguistic proficiencies, and integrating methods that enable learners to enhance these skills.

Moreover, in mixed-language classroom settings, another challenge that educators face is addressing diverse proficiency levels while also maintaining participation equilibrium amongst all learners in effort to foster equitable opportunities to exchange ideas and consider new perspectives. By incorporating service-learning programs in mixed-language classrooms that include facing societal challenges related to the target language, each learner can bring valuable insight and offer unique solutions and feedback.

As a transformative learning form, service-learning has been recently implemented in various academic programs around the globe including (but not limited to) Germany (Burth, 2016), Canada (Burth, 2016), and across eight public universities in Spain (five of which are located in Madrid) with a primary objective of examining societal issues and seeking solutions via application of coursework (Santos, 2017),

which resembles inquiry-based learning strategies, but differs in that it includes a service-learning component to activate solutions (Poteau, 2015). Both internal and external components are critical in effective service-learning program design. At the internal level, specific coursework that directly tie into course objectives, content, and make connections to service-learning should serve as part of the core requirements. Examples of internal components include diaries and critical self-reflective papers, which can serve to develop learners' vocabulary, grammatical, writing and critical thinking skills.

External components entail service work with a community organization outside of the classroom context that must also correspond to course objectives and address an organization's needs. External components and services vary depending on the course and the organization. For instance, the author has developed service-learning programs with non-profit organizations in Spanish for Business courses. Examples of the external components from these courses include professional utilization of Spanish in a variety of services including (but not limited to) designing and creating social media sites for a non-profit organization to increase business productivity and participation among linguistic minority residents in community affairs, telephone calls to local businesses to notify interested employees regarding gratuitous classes in English as a Second Language (ESL) in the region, researching grant opportunities for non-profit organizations to increase program offerings and services for linguistic minorities, and sight translation services. These components enable learners to actively connect course topics and engage in diverse interactions outside of the classroom context and critically self-reflect on the challenges, course-to-community connections, and overall experiences.

2. Empirical study

2.1. Research questions and study objectives

There is an undeniable need for intercultural competency and linguistic skill development in diverse professional contexts throughout the globe and a growing demand to foster learning environments that strengthen heritage language learners' connections to academic subjects and the community. Thus, this research study explores pedagogical and learning strategies that aim to extend beyond the institution and traditional methodologies.

The following research questions were examined in order to identify heritage language learners' perspectives on the role of service-learning programs on their development of these key areas, evaluate learners' professional and linguistic goals in language courses, and examine overall learner grammatical and lexical performance and development in service-learning courses:

- (1) With strategic development and implementation, can service-learning courses help heritage language learners connect course topics to the community?
- (2) Can service-learning courses help heritage language learners develop stronger professional skills in reading, writing, speaking, and/or listening in Spanish?
- (3) Can service-learning courses help heritage language learners understand that bilingualism is not synonymous with intercultural competency?
- (4) Can service-learning courses help heritage language learners learn more vocabulary in Spanish?
- (5) What are heritage language learners' overall linguistic skill development and professional goals in language courses?

2.2. Methods

2.2.1. Participants

This research study draws upon participant data from two different Spanish for the Professions courses: (1) Introduction to Spanish Interpretation and (2) Introduction to Spanish Translation. Introduction to Spanish Interpretation is a new course designed by the author that operated as a special topics course during this research study, but is now offered at the university as a permanent course. The Introduction to Spanish Translation course was revised by the author and now includes service-learning. The author developed and implemented the first service-learning course programs at the university, making these program offerings a new experience for all students.

Both courses examined in this study are undergraduate-level and mixed-language classes that consisted of learners of diverse linguistic proficiencies and backgrounds. A total of 30 students volunteered to participate in this study. A total of 19 students of the 30 confirmed that they spoke Spanish at home and self-identified as heritage or native speakers. As previously noted, although heritage and native speakers differ on many levels (e.g., oral/aural proficiencies, reading/writing proficiencies, etc.), this research includes all data from these 19 participants in order to improve how educators meaningfully connect learners across proficiency levels and backgrounds. Thus, for the purposes of this empirical analysis, this study isolates and delineates research findings based on the 19 individuals that noted that they speak Spanish at home. These 19 individuals represent more than half (approximately 63%) of those that participated. Both undergraduate courses require the same prerequisite (Spanish Reading and Composition) and constitute post-Intermediate language studies that count as credit toward various degree granting programs including (but not limited to) the Spanish major area of study and Spanish minor.

2.2.2. Study design and materials

This study consisted of two primary structural frameworks: (1) pre-service-learning stage to final week of classes of the semester that consisted of all class assignments, which includes service-learning submissions and (2) end-of-the-semester student questionnaire based on a Likert scale with open-ended questions. For the purposes of this research analysis, select numerical responses to the questions based on the Likert scale of the end-of-the-semester student questionnaire were analyzed using SPSS software.

To evaluate grammatical and lexical performance, this study began at the start of the semester during the pre-service-learning stage in order to assess overall learner development of specific syntactic and lexical structures throughout the service-learning course. Selected examples from learners' written submissions are reported on in the analysis. The student questionnaire was administered during the final week of classes to examine students' perspectives on the effects of the service-learning programs.

Both service-learning courses (Introduction to Spanish Interpretation and Introduction to Spanish Translation) required all participants to maintain a diary in Spanish to reflect on their service-learning experiences, submit a comprehensive final reflections paper in Spanish (2-3 pages in length), and submit vocabulary and culture charts that highlight key concepts and cultural aspects learned during their service-learning experiences. These data were used to not only examine students' individual reflective experiences and overall vocabulary and cultural learning, but to also evaluate their written language production throughout the course.

While the Introduction to Spanish Interpretation course allowed students to select from two types of service-learning programs (indirect or direct), the Introduction to Spanish Translation course required project-based service-learning as part of the core course requirements.

Beginning with the Introduction to Spanish Interpretation course, the indirect service-learning program in Introduction to Spanish Interpretation required the following two primary components that were completed outside of regularly scheduled classroom sessions: (1) interpreting four on-campus interviews (two conducted in Spanish and interpreted into English; two conducted in English and interpreted into Spanish) on the role of intercultural competence in interpretation and (2) preparing bilingual advertisements for a local non-profit organization and translating an organization's web page from English to Spanish. These data were used to examine learners' grammatical and lexical performance in written and oral discourse during their indirect service-learning program.

The direct service-learning program in Introduction to Spanish Interpretation required 15 hours of service at a non-profit community organization. These 15 hours of service were administered outside of regularly scheduled class sessions. The author established the following two partnerships to provide program flexibility for students and to personalize the service-learning program based on learners' individual interests: (1) partnership with a large urban hospital and (2) partnership with an urban medical clinic operated by medical students with attending physicians on site.

The Introduction to Spanish Translation course consisted of 6 project-based service-learning components. These components can be separated into two primary constructs: (1) post-editing of machine translation (MT) and revising of human translations of abstracts with undergraduate students in South America and (2) English-to-Spanish translations of medical and health-related resources for the student-run medical clinic associated with the university's medical school. These resources included translation of the medical clinic website to increase linguistic minority patient access to pertinent medical care in the community, translation of domestic violence resources in the region, translation of medical insurance enrollment, and translation of dental care informational sheet, and translation of regional resources for the homeless. The medical clinic provides health care services to undocumented, under-insured, and uninsured individuals and primarily serves patients with chronic conditions. Each of these project-based service-learning program translations were examined for grammatical and lexical performance and development.

3. Results

3.1. Research question 1: With strategic development and implementation, can service-learning courses help heritage language learners connect course topics to the community?

This research question was evaluated based on students' responses to the following question provided on the end-of-the-semester questionnaire with Likert responses from 1-Strongly Agree to 5- Strongly Disagree: 'This service-learning course helped me connect course topics to the community.'

Participant responses to this statement yielded significant results using a Chi-Square (X^2) test from isolated heritage language learners' responses ($N = 19$). All heritage language learners indicated 'Strongly Agree' or 'Agree' to this question. Table 1 displays the statistical significance of the results.

Table 1. Service-learning helps connect course topics to the community.

df	X ²	Sig.
1	8.895	.003

These findings are significant ($p < .05$) in heritage language learning research, indicating that the service-learning courses helped heritage language learners connect course topics to the community.

In line with this research question, students' comments from their final reflections paper further supported these findings. For the purposes of this study, any student comments that originally lacked appropriate written accents are included in the extracts to avoid message content miscomprehension. Learners' written accents (or lack thereof) are summarized in the analysis of research question 4.5.

Below are two extracts from two different students' (labelled as Student 1 and Student 2) final reflections papers with translations:

- Student 1 (in Introduction to Spanish Interpretation): “*Desarrollamos conocimiento y practicamos la interpretación de español a inglés e inglés a español. Obtuvimos una nueva comprensión sobre la importancia de tomar notas durante una interpretación y aprendimos diferentes estrategias para que nuestras notas sean más rápidas de escribir. Nos enseñaron cómo hacer conexiones y aplicar el contenido del curso a la comunidad a través del compromiso activo en el aprendizaje del servicio. También aprendimos la capacidad de examinar el impacto de la cultura de lenguaje en la interpretación.*”
- Student 1 Translation: “We developed knowledge and practice interpreting from Spanish to English and English to Spanish. We obtained a new understanding about the importance of taking notes during interpreting and learned different strategies in order to write faster notes. These taught us how to make connections and apply course content to the community through the active service-learning partnership. We also learned the capacity of examining the impact of culture on language in interpreting.”
- Student 2 (in Introduction to Spanish Translation): “*Sentí que mi cerebro pensaba críticamente más cada día porque estaba intercambiando el español y el inglés rápidamente. Creo que usualmente yo tomo el ser bilingüe como nada especial, pero después de esta clase no lo haré nunca más. La traducción me ha hecho notar algo muy importante. Cuando se traduce, no sólo estás convirtiendo las palabras en otro idioma. Las palabras son la clave y la base de otra cultura y, por tanto, otra realidad y mundo.*”
- Student 2 Translation: “I felt that my brain thought more critically each day because I was switching from Spanish to English quickly. I think that I usually take being bilingual as nothing special, but after this class I will not ever again. Translation made me notice something very important. When one translates, you're not only converting worlds into another language. The words are the key and base of another culture and, therefore, another reality and world.”

3.2. Research question 2: Can service-learning courses help heritage language learners develop stronger professional skills in reading, writing, speaking, and/or listening in Spanish?

This research question was provided in the end-of-the-semester student questionnaire as follows: “This service-learning course helped me develop stronger professional skills in Spanish in the following areas (check all that apply):

- Reading”
- Writing”
- Speaking”
- Listening”

To isolate heritage language learners’ responses ($N = 19$) to this statement, a Chi-Square (X^2) test was implemented. Results from this test indicated significant results ($p < .05$) as displayed in Table 2.

Table 2. Service-learning helps develop stronger professional language skills in Spanish.

	<i>Df</i>	<i>X²</i>	<i>Sig.</i>
Reading	1	11.842	.001
Writing	1	15.211	.000
Speaking	1	4.263	.039
Listening	1	6.368	.012

To illustrate the significance of these findings, Figure 1 demonstrates the overall percentages of learners’ ($N = 19$) development by professional language skill or competency (reading, writing, speaking, listening).

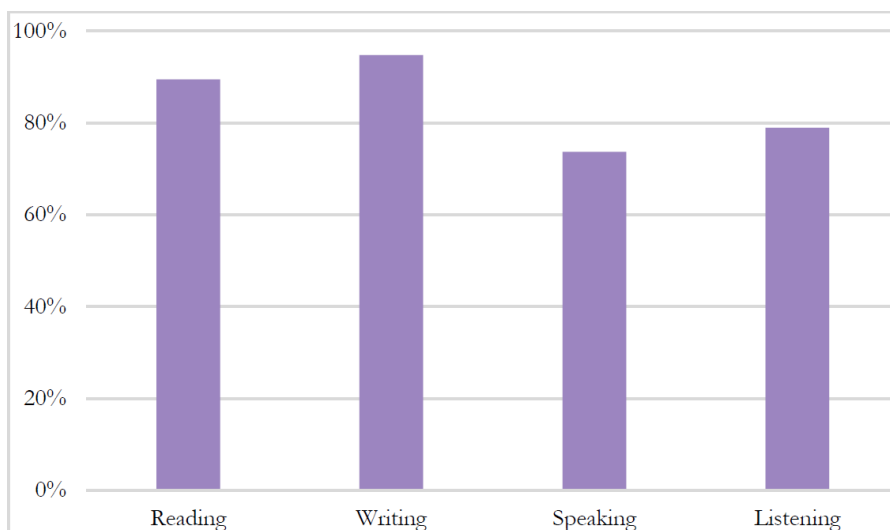


Figure 1. Service-learning and improved professional language skill development.

As demonstrated in Figure 1, overall results indicate that more than half of respondents reported improving professional language skill development across competencies as a result of the service-learning programs.

3.3. Research question 3: Can service-learning courses help heritage language learners understand that bilingualism is not synonymous with intercultural competency?

This research question was provided in the end-of-the-semester questionnaire as follows: ‘This service-learning course helped me understand that bilingualism is not synonymous with intercultural competency’.

For this particular research question, ‘Yes’ or ‘No’ responses were provided on the student questionnaire. Results indicate that all heritage language learner participants ($N = 19$) in this research study reported ‘Yes’ in response to this question. Hence, 100% confirmed that the service-learning program facilitated in their understanding that bilingualism is not synonymous with intercultural competency skills. As a result of the overwhelming responses, no statistical analysis was needed to assess learners’ responses to this question.

This research question was of particular concern to these analyses, since it is often presumed that a bilingual individual automatically exhibits intercultural competence. Clearly, each heritage language learner recognized and understood the need to distinguish the concepts of ‘bilingualism’ and ‘intercultural competence’ as a result of their diverse interactions throughout their service-learning experiences.

This particular research question can also be evaluated based on students’ final reflective papers, as is the case with the student previously noted (Student 2 in Introduction to Spanish Translation). Specifically, the final sentence in this student’s (Student 2) comment exemplified the perspective of the role of culture on language. Students in both courses reflected similar comments provided by Student 2, evidencing a common reflective thread throughout their experiences.

3.4. Research question 4: Can service-learning courses help heritage language learners learn more vocabulary in Spanish?

In the student questionnaire, this statement was written as follows with ‘yes’ or ‘no’ response options: ‘This service-learning course helped me learn more vocabulary in Spanish.’

This question yielded the same responses by all participants, with all participants ($N = 19$) or 100% affirming that the service-learning course contributed to increased lexical development. Hence, no statistical analysis was implemented to evaluate learner responses to this question since the response rate was clearly defined.

The following extracts taken from one respondent's (labeled as Student 3 below) final reflective paper in Introduction to Spanish Interpretation and the two different respondents (labelled as Student 4 and Student 5 below) in Introduction to Spanish Translation evidence the positive role service-learning had on vocabulary development:

- Student 3 (in Introduction to Spanish Interpretation): *“Colaborar con los pacientes, intérpretes y compañeros hizo que esta experiencia fuera una experiencia enriquecedora. Además, pude ampliar mi vocabulario y conocer un poco más sobre el papel de la cultura. También pude poner en práctica mi conocimiento adquirido en clase.”*
- Student 3 Translation: “Collaborating with patients, interpreters and peers made this experience enriching. Additionally, I was able to expand my vocabulary and become a little more aware of the role of culture. Also I was able to put to practice the acquired knowledge from class.”
- Student 4 (in Introduction to Spanish Translation): *“Puede expandir mi vocabulario no solamente para mi beneficio, pero para el beneficio de otros también.”*
- Student 4 Translation: “I’m able to expand my vocabulary not only to my benefit, but for the benefit of others as well.”
- Student 5 (in Introduction to Spanish Translation): *“Al traducir estas formas [sic] puede aprender muchas palabras en español y en inglés.”*
- Student 5 Translation: “Translating these forms allows one to learn many words in Spanish and English.”

Student 5 notes vocabulary development in both Spanish and English, which appeared as a common thread in students’ reflective papers in both courses. This evidences that connecting students in the community in professional contexts can strengthen academic and professional literacies in two languages.

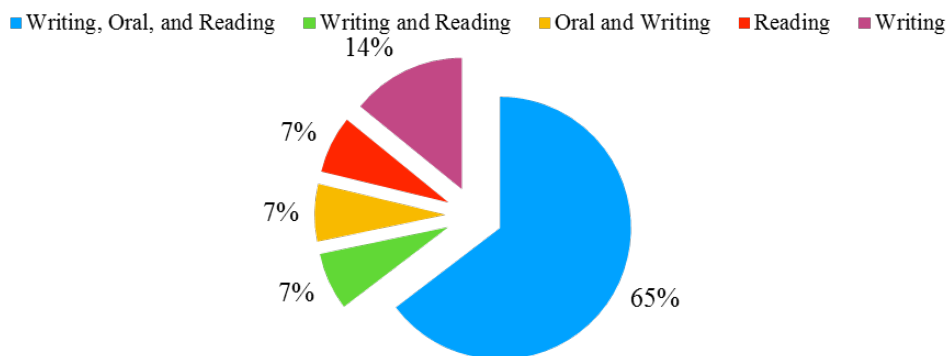
Additionally, in both courses, students also noted in their final reflective papers that they learned dialectal variations during their service-learning work and were able to freely express quotidian expressions and terms to produce effective translations or interpretations during their service-learning experiences.

3.5. Research question 5: What are heritage language learners’ overall linguistic skill development and professional goals in language courses?

In order to assess students’ professional goals and self-improvement perspectives for professional language use, the following excerpt of a question on the questionnaire asked students to check all that apply and/or provide a response that best addresses their personal goals (under ‘Other’ as shown below): “I speak Spanish at home, but I would like to...

- improve my writing in Spanish for professional use”
- improve my formal oral skills in Spanish for professional use”
- improve my reading comprehension skills in Spanish for professional use”
- Other”

Since no written responses were provided under ‘Other’, participant responses ($N = 19$) to this statement were analyzed (Graph 1).



Graph 1. Students’ goals for professional language use.

Graph 1 displays students’ responses with their overall goals to improve development and reading, writing, and/or oral skill development for professional use.

As is evident, the majority (65%) of participants noted their goals to improve writing, oral, and reading skills in both courses for professional use. Aligning with research question 4.2, it is evident that learners’ ($N = 19$) goals were achieved as a result of the service-learning courses.

In terms of grammatical errors observed in learners’ ($N = 19$) written service-learning submissions, one common grammatical mistake noted across all learners is the lack of written accents in nouns, interrogative words, and verbs. A few of these errors include the following: ‘*ingles*’ (correct form: *inglés*, which signifies ‘English’), ‘*sabia*’ (correct form: *sabía*, which signifies ‘knew’), ‘*disfrute*’ (correct form: *disfruté*, which signifies ‘I enjoyed’), and ‘*traduccion*’ (correct form: *traducción*, which signifies ‘translation’). All participants used *traducción* in its correct form by the end of the service-learning program, but not at all of them wrote *inglés* accurately. Since this concept was not used in any of the service-learning written work, this could have been a potential factor in learners’ not utilizing and developing the correct form.

Aligning with students’ self-reported developmental goals, two of the nineteen learners (labeled as Student 6 and Student 7 below) from Introduction to Spanish Translation noted the following in their final reflective papers:

- Student 6 (in Introduction to Spanish Translation): “*Aprendí que en el idioma español los días y meses no están en mayúscula como en inglés.*”
- Student 6 Translation: “I learned that in the Spanish language the days and months are not capitalized like in English.”
- Student 7 (in Introduction to Spanish Translation): “*Aunque mi primera lengua es el español, siempre he tenido problemas con los acentos. Creo que mi comprensión del español es bueno, sin embargo, en esta clase me ayudó a ampliar mis habilidades de aprendizaje en español, y a traducir al inglés.*”
- Student 7 Translation: “Although my first language is Spanish, I’ve always had problems with accents. I believe that my comprehension of Spanish is good, nevertheless, this class helped me expand my learning abilities in Spanish, and to translate into English.”

Overall progress in each of these competencies and skills was observed. For example, in both courses, some learners started the semester writing *hay* (“there is/are”) as *ay* and some (although not all) progressed to write the appropriate form in the final reflective paper.

Another learner wrote ‘*lla*’ instead of *ya* (‘already’) in the final reflective paper in Introduction to Spanish Translation. This could be attributed to the fact that *ya* (‘already’) was not a concept examined in service-learning or classroom work. This indicates that, while service-learning and coursework may be conducive to learning new vocabulary words and strengthening academic and professional literacy skills, it does not necessarily repair all mistakes. Nevertheless, this could also be due to the fact that the final reflective paper may not have been viewed as a formal written assignment and perhaps if it were a project-based service-learning translation, the learner would have directed greater attention to the written piece. Nevertheless, this same learner progressed from writing ‘*e*’ instead of *he* (‘I’ve’) to the correct form in the final reflective paper. The subsequent section summarizes these types of written skill proficiencies, which are critical for professional language use and are outlined in connection with established guidelines in heritage language learning.

4. Final remarks

The quantitative and qualitative results from both classes indicate positive learning effects. Learners’ overall positive satisfaction in the courses further support the potential implications of service-learning in their academic career and personal growth. For instance, according to the National Heritage Language Resource Center (NHLRC) at the University of California, curriculum guidelines for heritage language learners outline the need for appropriate assessment forms and understanding learner motivation. Specifically, the guidelines state: “they [heritage learners] often are unfamiliar with a more formal register called for in many situations outside the home”

(NHLRC, 2018). As previous (Carreira, 2002; Mikulski, 2008) and current (Beaudrie, 2017; NHLRC, 2018) research indicates, examining learners' written skill development is essential to improving pedagogical outcomes and learners' goals via meaningful connections. These connections entail bridging learners' goals to impacting the community.

Hence, with methodical planning and implementation, service-learning programs have the potential to meaningfully connect heritage language learners from the classroom to the community. The excerpt below is from a student's (labeled as Student 8 below) final reflective paper in Introduction to Spanish Translation. This extract truly grasps the final message of how educators have the power to transform classrooms into challenging and welcoming environments, encourage learners to express themselves, connect with others, and promote dignity and pride among all:

- Student 8 (in Introduction to Spanish Translation): *“Primero que nada, la clase y los proyectos me hicieron abrazar mi cultura y quién soy. A veces, al estar en un país donde la lengua principal es inglés, uno se siente menos y tal vez aislado de todos. Yo sé cómo se siente porque he pasado por momentos así, pero poco a poco aprendí que uno tiene que aceptar quién es y usar sus diferencias de una manera especial. Estar en esta clase, me hizo ver eso también; que está bien en ser diferente. Esas diferencias pueden ayudar a muchas personas y eso fue lo que nosotros hicimos. Pude aprender de otras culturas y eso para mí es muy importante. Es menester aprender de otras culturas porque no todos los hispanohablantes son iguales; tiene[n] sus propios dialectos, creencias, y tradiciones que juegan un papel en la traducción.”*
- Student 8 Translation: “First and foremost, the class and projects made me embrace my culture and who I am. Sometimes, being in a country where the principal language is English, one feels unimportant and perhaps isolated from everyone. I know how it feels because I went through moments like these, but little by little I learned that one must accept who you are and use your differences in a special way. Being in this class, allowed me to see this, too; that it's okay to be different. These differences can help many people and this was what we did. I was able to learn from other cultures and this to me is very important. It is necessary to learn from other cultures because not all Spanish-speakers are the same; they have their own dialects, beliefs, and traditions that play an important role in translation.”

Creating this type of classroom environment should be a primary goal of all educators to ensure that each individual learner has an equal opportunity for self-expression and to take on a leadership role as an autonomous learner and critical global citizen.

4.1. Caveats and limitations

Since this research study was conducted in two mixed-language classes, this may have presented challenges in various ways. For example, learners that indicated that they spoke Spanish at home were examined in isolation for the data analyses, but were part of a larger participant group comprised of diverse learners. This also presents another challenge for learners and also the author/educator in isolating specific grammatical and/or lexical constructs as a case-by-case matter. In attempt to address these challenges, the author/educator provided all learners in both classes with a revisions code sheet that included common errors as examples to self-revise. Some of these examples from the author's revisions code sheet included the erroneous use of 'e' for *he* ('I've') in order to help learners self-identify errors.

Another limitation is the lack of audio recordings among participants' service-learning experiences in the urban medical hospital and urban medical clinic. Audio recordings would be useful to assess oral progress throughout the service-learning program, but are not possible due to the HIPAA Privacy Rule.

4.2. Suggestions for future research

Among the many challenges faced by educators across the globe are connecting learners to other disciplines and the community and fostering supportive connections at the personal level that enable each learner to recognize weaknesses and strengths at the autonomous level. Although service-learning programs may seem to offer these connections, there are four critical pedagogical components that can affect learner attitudes, motivation, and cognitive development. These four pedagogical components are: (1) research, (2) development, (3) implementation, and (4) analysis.

From researching community organizations and their needs to examining students' background knowledge and diverse proficiencies levels and language needs, the research component serves as the introductory phase of effective service-learning program development. The developmental component consists of strategic planning of service-learning work and coursework to cohesively tie key course objectives to community and learner needs. Implementation is the third component that entails methodologies and materials utilized to bring the service-learning program to life within the classroom and the community, which progresses throughout the service-learning course and feeds into the final component of analysis. Analysis requires that educators assess the overall effects on the community and learners' affective, behavioral, and cognitive development throughout the service-learning course.

As is the case with all empirical research and pedagogical methods, analysis is essential to continuously innovate and challenge learners on multiple levels. Thus, suggestions for future research include isolating key areas and specific grammatical

and/or lexical constructs that learners and educators identify as areas in need of improvement, which can be assessed at the end of the semester to further evaluate program effectiveness and individual learning goals. For example, although the erroneous written use of *ya* ('already') as 'lla' and *he* (or 'I've') as 'e' were not addressed in service-learning or class lessons, identifying these types of inaccurate constructs at the beginning of the semester would be beneficial. In future Spanish for the Professions courses, it is important to recognize that translations of professional documents and interpretations in medical contexts may not include these types of concepts and should, therefore, be addressed and assessed in the courses.

CONCLUSION

Research, strategic development and implementation, and analysis lie at the core of effective service-learning programs. As evidenced, service-learning programs have the potential to increase learner motivation, enhance learning experiences, strengthen intercultural competence development, and enhance language and professional skill development. Moreover, these essential aspects can also foster individual learner connections of course topics to the community. Curricular innovations that empower learners to actively engage in community, cultural and social issues via direct application of course content with diverse individuals allows for both challenging and supportive learning environments. Consequently, these learning environments can strengthen individual learner's growing needs and interests in a globally changing landscape. Providing learners with ample opportunities to serve as active participants in both the classroom and community can enrich learning experiences and pave the way to cultivating lifelong global learners and leaders.

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