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Doctorat en Traducció i Estudis Interculturals

Examining community interpreting students through undergraduate action research, mentorship, curriculum design and assessment:

A case study of the Community Interpreting Program at Viterbo University

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To Mimi:
For dreams. I carry you with me everywhere.

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Index of Abbreviations

AAC&U	American Association of Colleges and Universities
AR	Action Research
ASL	American Sign Language
CI	Community Interpreting
DACA	Deferred Action for Childhood Arrival
DEI	Diversity Equity and Inclusion
ELL	English Language Learner
ESL	English as a Second Language
GRQ	General Research Question
HIP	High-Impact Practice
HL	Heritage Learner
HLL	Heritage Language Learner
IPEC	Interprofessional Educational Collaborative
ISO	International Organization for Standardization
ITS	Interpreting and Translation Studies
L1	First Language
L2	Second Language
LEP	Limited English Proficient
NPIT	Non-professional Interpreting and Translation
SSL	Spanish as a Second Language
SRQ	Subsequent Research Question
TIS	Translation and Interpreting Studies
T&I	Translation and Interpreting

1. Introduction

As an associate professor of interpreting studies and Spanish at Viterbo University, a scholar in a field that is still forging its way to professionalism, and an interpreting practitioner, I assert that my positionality influences the way that I teach, the research presented in this doctoral thesis by compendium of articles and the ways that I understand what manifests in both the classroom and in the interpreting scenarios that I carry out in the community. I understand community interpreting as a means of achieving linguistic and social justice.

Bilingual education scholar, Ellen Sarafini (2023), asserts that, "The work of social justice is a dialogic endeavor, one that emerges through (un)knowing, (de)constructing, and (re)imagining. … it involves developing a critical awareness of self in relation to others and to the broader sociohistorical and sociopolitical context in which one lives." For these reasons, and with the personal objective of demonstrating cultural and academic humility, I offer here specific details related to my personal identity markers, teaching philosophy, and circumstances of the spaces in which I work, all of which are pertinent to the topics at hand in this dissertation.

I am a White, middle-class, university professor whose first language is English. I began learning Spanish as a second language in the public school system of a predominantly White suburb of Milwaukee, historically and currently one of the most segregated metropolitan cities in the United States (Logan & Stults, 2021). I now reside in the small city of La Crosse, Wisconsin, which occupies the ancestral lands of the Ho-Chunk first nation and is surrounded by immense agricultural and rural landscapes. In terms of ethnic and racial make-up, La Crosse County was 90% White, and only 2.3% Hispanic or Latino[1] in 2020, with approximately 94% of residents who report being monolingual English-speakers (U.S. Census Bureau, 2022b; 2021a).

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[1] The U.S. Office of Management and Budget (OMB) maintains that race and ethnicity are separate and distinct concepts and that U.S. federal agencies are mandated to collect and report data according to a minimum of two ethnicities: (1) Hispanic or Latino and (2) non-Hispanic or Latino. The OMB has defined "'Hispanic or Latino' as a person of Cuban, Mexican, Puerto Rican, South or Central American or other Spanish culture or origin regardless of race" (U.S. Census Bureau, 2022a).

Despite the small percentages of racial, ethnic and language diversity documented within La Crosse, significant numbers of transient Latino/a/e[2] immigrants live and work in the rural areas of this county, though numbers are often not accounted for in US Census data due to the unauthorized immigration status of many. However, it is estimated that 76,941 undocumented immigrants live in the state of Wisconsin, making up more than 25% of the immigration population of the state. Of these immigrants, 91.3% are of working age, employed on area farms, food processing plants, factories, etc. (American Immigration Council, 2024). It is in this context, in 2009, that the Community Interpreting Certificate at Viterbo was born.

Beyond my work as a professor and researcher in interpreting studies, I provide language access within both rural and urban spaces in Wisconsin as a Spanish < > English community interpreter at Mayo Health System, in Wisconsin Circuit Courts, on area farms, in local schools and for social service agencies. While my contact with the Spanish-speaking community is daily and extensive, I do not have the lived experience of the Latino/a/e populations with which I work and for whom I interpret. While I participate in linguistic justice initiatives and understand community interpreting as an act of social justice, inclusion, and equity, I do not carry the trauma of immigration that many of my students and community members have endured. While I have lived outside of the United States for more than 7 years (in Chile, Spain, and France) and

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[2] Throughout the introduction and conclusion of this doctoral thesis I have chosen to use "Latino/a/e" to name those of Latin American descent or origin in the classrooms and communities within which I work. Within the politics of language around terms such as "Latino," "Latine," "Latin@," and "Latinx," I have chosen to move away from several of these attempts toward gender inclusivity and gender neutrality. While "Latin@" attempts to be more inclusive of females, it continues to exclude those who identify outside the gender binary. Academics have debated whether the term "Latinx" fulfills its gender-neutral objective or is yet another demonstration of English-language imperialism on the Spanish language which does not end words with the linguistic marker "x". Moreover, recent studies confirm that of the people that the term "Latinx" intends to describe, few recognize the term or identify as such (Del Río-González, 2021). My anecdotal experience in the classroom with Latino/a/e students supports these findings. While the Real Academia Española does not support the use of "x" or "e" as gender-neutral alternatives (Real Academia Española, 2020), many online, academic, and international communities continue to use these linguistic signifiers, underscoring how a living language cannot be contained within the walls of institutional norms. A prolonged debate around the ethics, politics and power dynamics related to these labels is beyond the scope of this thesis, however, as someone who does not hold the identity of any of these terms, it seems to me most appropriate to know both who I am addressing with my scholarly work and about whom I am speaking. This thesis, carried out at the *Universitat Autònoma de Barcelona*, is written by compendium of articles for an audience that is largely European. Yet, my students and those for whom I interpret in the United States are largely Latin American or of Latin American descent, identifying in a plethora of ways that are steeped in history, culture, sociolinguistics, and personal choice. Always, in interpersonal relationships I do my best to call individuals according to their personal preferences.

traveled the world extensively, these experiences were born of choice and privilege, not of obligation to flee war, violence, or poverty.

In eight years as the professor and primary administrator of the Community Interpreting Program at Viterbo University, I have only begun to understand the stakes of teaching aspiring community interpreters. The sixty-two students who have graduated from this program since 2015 embrace immensely diverse cultural backgrounds and life experiences (8 nationalities, ranging in age from 17-66, sometimes speaking more than two languages…). As such, they have acquired varying professional and linguistic skill sets. Thus, teaching methods in these interpreting studies classrooms have required flexibility and the tailoring of instruction to the specific needs of different student profiles.

One of my primary motivations for carrying out research in the field of interpreting pedagogy is to effectively train traditionally underserved bilingual students to become ethical leaders in the field of interpreting in the United States. When teaching community interpreting and directing the program, my philosophy as a professor and administrator is based on three primary beliefs. First, a student-centered classroom gives university students a sense of control and accomplishment in their learning experience. Second, fostering healthy interpersonal relationships between teacher and student is one effective way to foster transformative learning. Lastly, teaching strategies and approaches should change and evolve by means of action research in the classroom and reflective teaching practice. I share Sarafini's (2023) assertion that it is our responsibility to work *with* the diverse students in the classroom, creating multi-directional, collaborative spaces of negotiated meaning and understandings. Sarafini advocates for educators to integrate "ample opportunities for negotiation of meaning and dialogic constructions of knowledge as well as possible 'critical entry points' for building a truly liberatory praxis and communities of practice that are both sustainable and sustaining" (Sarafini, 2023).

When such teaching methods are not adopted, and a trend of academic failure for marginalized or underprivileged students is observed, I believe that systemic discrimination must be examined and addressed. On the contrary, the academic success of these same student populations is worthy of celebration for our communities as we work to deconstruct systems that uphold

racism, colonialism, sexism, etc. This doctoral thesis places my action research, personal experiences and values as both a university professor and a community interpreter within the realm of a body of scholarly work where community interpreting education and mentorship for diverse students of mixed language profiles is examined in its intersection with language access for communities at large.

1.2   Community interpreting today

According to the International Organization for Migration (2022), there are an estimated 281 million individuals (3.6% of the global population) who are living in a country other than their country of origin in the world today. Driven by forces such as geo-political instability and climate change (i.e., COVID-19, armed conflict, natural disasters), human migration continues to advance the demand and the provision of language services world-wide (Monzó-Nebot & Wallace, 2020). Greater still than migrants on the move, are the number of indigenous populations with whom we live, estimated to include 476 million people (6% of the world population) and comprising more than 4,000 of the world's approximately 7000 existing languages (World Bank, 2023). Yet, on both historic and current grounds, language access services in public and private spheres are scarce for many indigenous peoples, if available at all (de Varnennes & Kuzborska, 2016). Beyond immigrant and indigenous populations, there are also 430 million people who have disabling hearing loss (more than 5% of the world population), driving the immense need for signed (rather than spoken) language services (World Health Organization, 2023). It is undeniable that language access services whether in person, by telephone or via video-remote services are needed today, as much as ever, by hundreds of millions of individuals on a global scale – and mostly within community contexts.

While consensus on definitions and nomenclature for community interpreting (CI) (better known as public service interpreting in European contexts), have varied and even contradicted one another for decades (Mikkelson, 1996; Roberts, 2002; Hale 2009; Bancroft et al., 2015), the International Organization for Standardization (ISO) has defined community interpreting as "bidirectional interpreting that takes place in communicative settings… among speakers of different languages for the purpose of accessing community services" (2014). Today this profession emerges everywhere, including public and private institutions, human and social

services, healthcare institutions, business and industry, faith-based organizations, and emergency situations like natural disasters and war. From an organizational perspective, the ISO affirms that community interpreting is "a profession, not … an informal practice such as interpreting performed by friends, family members, children, or other persons who do not have the competences and qualifications specified in this International Standard or who do not follow a relevant Code of Ethics" (2014).

However, from a social perspective, "Community interpreting takes the interpreter into the most private spheres of human life" (Hale, 2007: 25). The significance, and the urgency that individuals and communities have in communicating across differing languages and cultures, require CI to emerge beyond the parameters of a professional construct. Community interpreting happens for families when law enforcement knocks on the door, for neighborhood churchgoers who want to understand religious leaders' messages, for friends in doctor's appointments, for newly arrived immigrants in schools, shelters, and detention centers. The indispensable need and intimacy of such cross-linguistic and cross-cultural communication also marks community interpreting as a skill, a craft, and an interpersonal necessity, regardless of prestige or perception, that has stood the test of human time (Roberts, 2002; Pöchhacker, 2016; Falbo, 2016). As such, CI is most frequently carried out by relatives, friends, acquaintances, children, and good Samaritans. As affirmed by Martínez-Gómez, "In fact, every bilingual individual is a potential non-professional interpreter, as they are selected on the basis of their (apparent) competence in the two languages involved –spoken or signed – and their immediate availability" (2015). It is this sort of community interpreting that has been coined by many scholars as non-professional interpreting and translation (henceforth NPIT).

Extensive literature reviews on NPIT, (Antonini et al., 2017; Martínez-Gómez, 2015) assert that numerous terms have emerged in the literature over the past 40 years to describe interpreting and translation that occur organically in communities ("natural translation," "native translation," "language brokering," "child language brokering," "informal," "ad-hoc," etc.). As such, various terms and opinions have contributed to an academic debate around the distinctions between professional and non-professional within interpreting and translation studies (henceforth, ITS).

On the one hand, many scholars agree that the disadvantages of non-professional interpreting (i.e., the lack of sufficient language proficiency and terminology or the challenges of remaining impartial and respecting confidentiality) do not always guarantee quality interpreting services (Martínez-Gómez, 2008; Navaza, Estévez & Serrano, 2009; Flores, et al., 2012; Sanz-Moreno, 2018). Recently, the research group MIRAS (Mediation and Interpreting: Research in the Social Field) at UAB (Universitat Autònoma de Barcelona) carried out reports and research on child language brokering in Catalunya, Spain, that highlighted both advantages and disadvantages of minors who interpret in educational, social service and health contexts[3]. These studies highlighted some concerns of teachers and social service professionals about child language brokering, including that minors are asked to manage topic areas and responsibilities inappropriate for their age and social positioning. Furthermore, they reported that such brokering can be mentally and emotionally taxing for minors and ultimately lead to mistrust between child language brokers and the interlocutors (Vargas-Urpí, et al., 2021; Vargas-Urpí, et al., 2022; Orozco Jutorán & Vargas-Urpí, 2022).

On the other hand, these same reports also underscore the way that linguistic intermediation may give bilingual youth a sense of value, connectedness, usefulness, and social responsibility/capital (Vargas-Urpí, et al., 2021; Vargas-Urpí, et al., 2022). This data, along with previous literature on child language brokering also reveal a mix of emotions perceived by both adults working with child interpreters and young language brokers themselves. Just as the range of positive or negative emotions (perceived or experienced) is wide-ranging, so are the cognitive, social, and psychological impacts on these children, which seem to vary largely by context and individual experience (Orellana, 2009; Antonini, 2016; Vargas-Urpí, et al., 2021; Vargas-Urpí, et al., 2022; Vargas-Urpí & Romero Moreno, 2022; Orozco Jutorán & Vargas-Urpí, 2022; Arumí & Rubio Carbonero, 2022; Martínez-Gómez, 2024). What is also apparent is that scholars in the field of ITS have affirmed the ways that child language brokers can capitalize on their bilingual skills and gain significant professional and life-skills (i.e., confidence, self-awareness, curiosity) (Valdés, 2003; Angelelli, 2010). Undeniably, non-professional interpreters and translators, whether young language brokers or otherwise, are those who successfully weave the intercultural

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[3] Young natural interpreters: child language brokering in education, social and healthcare settings (ref. RT12018-098566-A-100), funded by the Spanish Ministry of Science, Innovation and Universities (MCIU/AEI/FEDER, UE).

tapestries of communities across the globe every day, keeping the public and private spheres of society functioning for the common good.

Though NPIT has been rebuked, reprimanded and deemed dangerous by many scholars and practitioners in recent decades, some emerging research on NPIT seeks to reconsider the oversimplified trends that are quick to place informal language brokers in a marginal or subordinate position to certified practitioners, instead examining how such practitioners may serve as co-contributors to the field (Martínez-Gómez, 2015; Wallace, Pinzl & Martínez-Gómez, 2022). Despite fears that NPIT may contribute to the erosion of professional interpreters' status and the field of Interpreting and Translation Studies itself, particularly as related to questions of ethics (Monzó-Nebot & Wallace, 2020), some assert the general practice of interpreting as a social responsibility (Drugan and Tipton, 2017). Indeed, the significant social position and agency of non-professional interpreters and translators is cited in the literature as an important component of social inclusion for new immigrant populations (Antonini, et al., 2017). Whether geo-political instability has led to involuntary displacement or voluntary migration, what is clear is that non-professional translators and interpreters continue to facilitate cross-cultural communication and new forms of civic engagement even as societies face the many challenges of failing public services (Pérez-González & Sebnem, 2012).

While the importance of professional training, competence, and ethical considerations are often at the forefront of conversations related to NPIT, the factors that specifically differentiate professional from non-professional within the field are diverse. Attempting to shed light on the complex and varied landscape of NPIT, Antonini et al. (2017) define the term 'non-professional' by focusing on the individuals that carry out interpreting and translation without formal training in the field; those who often go unpaid, who carry less social prestige than a formal interpreter and/or may not know or follow the codes of ethics and standards of practice. Whether 'professional' or 'non-professional,' both the importance and the evolution of community interpreting throughout the world has been indisputable even since ancient times. This thesis seeks to understand professionalization of CI in the terms of Martínez-Gómez, "as a continuum where all segments are equally relevant to the discipline" (2015: 419). Nevertheless, CI did not

truly begin to gain particular importance on an international platform in the realms of research, education, legislation, etc. until the 1980s and 90s (Pöchhacker, 2016).

As for research in CI, the Critical Link conference series, beginning in 1995, served as one of the first spaces to bring researchers, trainers, and practitioners together. Since then, the field has grown significantly and been studied from a wide variety of disciplinary lenses (i.e., psychology, sociology, anthropology, applied linguistics, discourse studies, conversation analysis, intercultural communication, and cultural studies) (Vargas-Urpí, 2012; Pöchhacker, 2016). The call has remained constant, however, in recent decades, for interpreting and translation studies (community interpreting included) to continue to bridge the gaps between theory, education, and practice (Hale, 2007; Angelelli, 2008; Pöchhacker, 2010; Wadensjö, 2011; Cirillo & Niemants, 2017).

As interpreting training (most exclusively for conference interpreters) began to find its way into higher education in Europe in the early 1960s, interpreting education curriculums transitioned from a primary focus on professional skill sets to programs in the 1980s that incorporated more theory and academic research (Pöchhacker, 2016). In terms of interpreting education in general, important themes related to training have included curricular concerns, student performance and assessment, as well as methods for teaching students to achieve adequate competencies (Pöchhacker, 2016). The underlying influences of society, culture, politics, and institutional structures on curriculum development of interpreting and translation programs have also been underscored by ITS scholars (see Arjona-Tseng, 1990; Sawyer, 2004).

Indeed, most institutions of higher education that offer ITS as degree tracks do not focus on community interpreting (Pöchhacker, 2016) and opportunities for CI training are often limited to isolated courses or, at most, certificate programs (Roberts, 2002) such as the one studied in this thesis[4]. Over the past three decades, comprehensive translation and interpreting programs at the undergraduate level have grown around the globe in places like Australia, Sweden, Canada and the UK (Baker & Saldanha, 2011). However, master's degrees still most often focus on conference interpreting (Pöchhacker, 2016). In tandem with the emergence of professional

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[4] Certificate programs in the US are often 9-30 credits and offer specialized training and/or lead to a particular job.

associations and legal provisions supporting language access, interpreting education for spoken languages has encountered many of the same challenges that ASL (American Sign Language) interpreter education moved through in the mid-20th century (a large increase of training workshops as a reaction to increased demand, a lack of research-based teaching methodologies, etc.) (Rogers Drewek, 2023). Still today, both guidelines for higher education curriculums specific to community interpreting programs and research on assessment for CI programs is sparse, accounting for drastically varied readiness and skill levels of 'trained' community interpreters (Rogers Drewek, 2023). Moreover, accreditation is mostly relegated to either medical or legal specifications rather than certification processes for CI that include the widespread social spaces within which community interpreters work. However, the incorporation of CI has become ever more prevalent in undergraduate and postgraduate interpreting and translation programs in European countries, such as Spain (Navaza, Estévez & Serrano, 2009; Álvaro Aranda & Lázaro Gutiérrez, 2021).

Even given these important advances, the essential profession of community interpreting still faces many challenges in terms of professionalization across the globe, leading to continued conversation amongst both interpreting practitioners and scholars about how providing language access is a question of social justice, equity, and ethics in modern society. A growing number of scholars and practitioners argue that linguistic justice in the form of access to public services is a fundamental human right that entails the rights to understand and to be understood; to speak and to be heard (Piller, 2016; Mehl, Sierra, & Perrichi, 2021). In June 2021, the 1st International Conference on the Right to Languages: Linguistic Policies and Translation and Interpreting in Public Services and Institutions[5] was held in Valencia, Spain, bringing together scholars from around the world to articulate the current landscape of language rights and linguistic justice.

From the lens of applied sociolinguistics, Piller (2016) has systematically examined the social advantages and disadvantages of linguistic diversity, calling for sustained, nuanced conversations around the intersectionality of language with other identities such as race, socioeconomic status, or legal status, which often lead to systemic injustice. Linguistic justice cannons call to continue advocating for legislation that aides in reducing the cultural and linguistic barriers in community

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[5] For further details about this conference, see the following website: https://blogs.uji.es/cidl/

interpreting contexts (Pérez Esteban, 2023). One example of legal provisions supporting such rights in Europe is the *Directive 2010/64/EU on the Right to Interpreting and Translation in Criminal Proceedings*. However, the transposition and implementation of the stipulations of this law in many European Union (EU) contexts has been inconsistent due to differing interpretations of EU member states (Katschinka, n.d.). While linguistic justice has still not been fully recognized in most societies as a universal right, language policies, often closely tied to anti-discrimination laws and language preservation, continue to evolve across the globe, helping to promote healthier communities that embrace more diversity and equity in existing public and private spheres. Indeed, community interpreting, depending on the lens applied, may be seen as a historic and current social phenomenon, a profession, a field of study, an obligation, and/or a right.

1.3   Community Interpreting in the US

Language experts estimate that at least 350 of the world's 7000+ languages are spoken in the United States today (United States Census Bureau, 2021b, 2021c). In fact, it is estimated that 20% of the US population speaks a language other than English at home (Dietrich & Hernandez, 2022), with more than 25 million of those individuals estimated to have limited English proficiency (Zong & Batalova, 2015). In 2022, employment for interpreters and translators in the US was projected to grow 20% between 2021-2031 (US Bureau of Labor and Statistics, 2022).

However, one year later, the US Bureau of Labor and Statistics (2023) reported 700 less jobs in the translation and interpreting industry and the job projection growth from 2022-2023 dropped to four percent. Though the impact of advances in technology, especially generative artificial intelligence (AI), have spurred significant debate and projections in the language industry, the statistics still indicate resilience in the market and a sustained demand for language access in healthcare, education, law enforcement, government, agriculture, private industry, and other social contexts (US Bureau of Labor and Statistics, 2023; Varga, 2024). Some scholars argue that academic institutions must hold steady, interact intelligently with technology, get creative about how interpreters work, and turn the focus of the industry to languages of lesser diffusion, where such technology is still not particularly effective (Pym, 2024; Allen, 2024).

As a nation in which millions of immigrants both historically and currently seek refuge, the United States is one of the countries (along with those such as Australia, Canada, and the United Kingdom) that has forged the way for community interpreting since the 1960s and 70s (Navaza, Estévez & Serrano, 2009). As early as 1959, the American Translators Association (ATA) was founded with a mission to "promote the recognition of professional translators and interpreters, to facilitate communication among its members, to establish standards of competence and ethics, to provide its members with professional development opportunities, and to advocate on behalf of the profession" (American Translators Association, 2023). While Title VI of the Civil Rights Act of 1964[6] laid the groundwork for language access laws in the US, the 1978 *Court Interpreters Act* pushed forward testing and certification on both the state and federal levels which had reverberating professional effects in the adjacent field of community interpreting (Pöchhacker, 2016). This coincided with the establishment of the National Association of Judiciary Interpreters and Translators (NAJIT), also in 1978, that set out "to build professionalism among interpreters and translators working in the courts and other legal and law-enforcement settings, to support language access to the courts, and to educate the public about the need for qualified and well-trained professional judiciary interpreters and translators" (National Association of Judiciary Interpreters and Translators, 2024). Since much of the legal or quasi-legal work of judiciary interpreters involve encounters that occur in the community (for example, police encounters, legal documentation in medical contexts and schools, etc.) the sub-fields of judiciary and community interpreting often do intertwine, despite their real or perceived differences. Therefore, the mention of elevating the competence of judiciary interpreters and translators is relevant here in that the professionalization of this sector of interpreting proved an impetus for advancing the field of CI.

Partially in response to a need for better patient safety for immigrants in public services (Allen, 2024), an urgent and recurrent call from scholars and practitioners for further professionalization

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[6] Language access is mandated by United States Federal law, beginning with the US Courts' interpretation of Title VI of the Civil Rights Act of 1964, 42 U.S.C. 2000d et seq., which "prohibits discrimination on the grounds of race, color, national origin in any program that receives Federal funds or other Federal financial assistance" (Office for Civil Rights, 2021). In 1974, a pivotal case regarding language access, Lau v. Nichols, was brought before the US Supreme Court. The court ruled that treating someone unfairly (in this case, not providing equitable education to Chinese school children) due to their limited English proficiency is considered discrimination based on national origin (US Department of Education, 2020).

of the field began in the 1990s (Mikkelson, 1996; Roberts, 1997; Bancroft, et al., 2015). Though continued legislation[7] and the establishment of professional associations were already underway in the US by this time, much has continued to push the field toward more professionalization in accordance with these recommendations in recent decades. The formation of professional associations such as the International Medical Interpreters Association (IMIA) in 1986 and the National Council on Interpreting in Health Care (NCIHC) in 1994, led to a plethora of education opportunities for practitioners, educators, and the public (International Medical Interpreters Association, 2024; National Council on Interpreting in Health Care, 2024). These associations have worked diligently to establish official codes of ethics and standards of practice to continue defining the role and function of community interpreters in medical contexts.

Language access legislation continued to advance in 2000, with Executive Order 13166[8]. This order, carrying the force of a law, mandated federally funded programs and services to require the provision of "meaningful access" to Limited English Proficient (LEP[9]) individuals which often includes some combination of interpreting and translation services (U.S. Department of Justice, 2020). A decade later, in 2010, the civil rights provision of the Affordable Care Act (ACA), Section 1557, outlined that any program or activity that receives funding from the Department of Health and Human Services (HHS) must provide language access services to individuals of limited English proficiency, expanding health care access eligibility, and providing more specific guidelines about how such services are to be carried out in the United States[10] (U.S. Office for Civil Rights, 2016).

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[7] Notably, in 1990 the Americans with Disabilities Act was enacted, which included provisions for sign language services. While these requirements are different from those outlined in Title VI, the approach to providing language services shares similarities (U.S. Department of Justice Civil Rights Division, n.d.)

[8] Executive Order 13166, "Improving Access to Services for Persons with Limited English Proficiency" further mandated Federal agencies to publish guidance for LEP recipients in compliance with the aforementioned rulings on Title VI and provide meaningful access to recipients of Federal financial assistance (Exec. Order No. 13166, 2000).

[9] According to the US Office of Civil Rights, "An individual with limited English proficiency is a person whose primary language for communication is not English and who has a limited ability to read, write, speak, or understand English" (2016).

[10] Though certain changes were made to this Federal civil rights law under the Trump administration (i.e., healthcare providers were no longer required to provide written notice informing patients of their language access rights), in August 2022, the U.S. Department of Health and Human Services, published a proposed rule to reverse such changes and build on the language access pieces of the original law (Albarino, 2022). While results of this proposal are still pending, the Office of Minority Health, under the Department of Health and Human Services, announced more than four million dollars in funding to better inform LEP individuals of their rights in 2022 and updated the HHS Language Access Plan in 2023 (Haldar, et. al., 2023).

In 2011, the Certification Commission for Healthcare Interpreters (CCHI), also developed a comprehensive national accreditation exam for healthcare interpreters which has certified over 5,000 medical interpreters over the past 13 years (Certification Commission for Healthcare Interpreters, 2024). Most recently, in 2021, the American Association of Interpreters and Translators in Education (AAITE) was established, publishing two new (and separate) codes of ethics for interpreters and translators in December of 2023 (American Association of Interpreters and Translators in Education, 2023). These significant advances in the field of community interpreting over the course of six decades highlight the continual evolution of the field of CI as it continues to professionalize in the United States.

Pushed by these professional developments, continued immigration trends and language policy, the US has followed the lead of countries such as Australia, in moving interpreter training from community-based orientations toward programs with more academic underpinnings, theory and research, with the aim of better supporting interpreting practitioners (see Bontempo & Napier, 2007). Notably, interpreter trainers have increasingly begun to carry out research with the goals of improved pedagogy or better career opportunities (Pöchhacker, 2016). However, historical and cultural underpinnings as well as the influence of a wide variety of stakeholders (language policy makers, professional associations, government authorities, universities, etc.) have led to significant divergence in pedagogical approaches and curriculums for community interpreting education (Baker & Saldanha, 2011). As such, uneven skill sets and competencies are notable among 'trained' interpreters working with and entering the field (Bontempo & Napier, 2007).

While more and more interpreting training programs have begun to emerge within higher education, mastering the broad spectrum of skills that are necessary to practice interpreting as a professional arguably requires time and practice beyond the curriculum. This thesis, therefore, positions training programs, such as the one studied here, as another steppingstone along the way toward further professionalism in the field of community interpreting.

1.4 Objectives and Research Questions

The three publications of this thesis by compendium of articles are the result of eight years of reflective teaching, data collection and analysis. This doctoral project departs from scholarship in the fields of translation and interpreting studies, education, and mentorship, underscoring both the successes and growing edges of one undergraduate community interpreting certificate at a small private institution in the United States, Viterbo University.

The primary research objective of this doctoral thesis seeks to better understand effective teaching via the high-impact curriculum components of Viterbo University's undergraduate interpreting curriculum have on both the diverse students of the program and the larger community. As encouraged by Kuh (2008), the HIPs examined here require an extensive time commitment on the part of both the professor and the students, push pedagogical methods beyond the traditional classroom, fortify important connections between educators and students and offer students regular and meaningful feedback for a transformational learning experience. Such teaching and learning both within and beyond the classroom inspire cooperative learning between teacher and student, teacher and community, students themselves, and students with their own communities. Secondarily, this thesis aims to explore the pedagogical mechanisms that are possible to improve retention of the many less-privileged students that partake in this certificate (Latino/a/e, first-generation, low-income, etc.).

Each article of this thesis also has an objective. In article one, the aim was to examine the effects of mentoring undergraduate students through the process of undergraduate action research. In article two, the goal was to study the textual aspects of interpreting performance of heritage speakers of Spanish and second language learners in unscripted role-playing in a clinical simulation lab. In article three, the objective was to understand more globally how the Community Interpreting Certificate at Viterbo University has impacted recent graduates and community members who work closely with the program.

To achieve the aforementioned objectives, research questions were then formulated. This study has set out two general research questions (GRQs) and six subsequent research questions (SRQs) related more explicitly to specific articles of this work as is indicated in parentheses.

GRQ1: What effect does the implementation of high-impact curriculum components into the Community Interpreting Certificate at Viterbo University have on the diverse students of this interpreting studies program and the larger community?

SRQ1 (Article I): How do students perceive the process of carrying out undergraduate action research that is implemented into the interpreting curriculum as a high-impact mentorship practice?

SRQ2 (Article I): How does the practice of mentoring students through undergraduate action research empower students and engage them in their local communities?

SRQ3 (Article III): How do graduates perceive their experience in the interpreting program and its influence on their work as professionals after graduation?

SRQ4 (Article III): How do community partners perceive working with students, graduates, and faculty of the interpreting certificate and how it has affected their personal and professional understandings of language access in the community?

GRQ2: What solutions may be found for more effective teaching in diverse interpreting classrooms of complex intersectional identities and mixed language profiles (heritage speakers and second language learners)?

SRQ5 (Article II): How do heritage speakers of Spanish and second language learners of English and Spanish perform in terms of textual aspects of dialogue when carrying out unscripted role-playing in a clinical simulation lab?

SRQ6 (Article II & III): Are there any teaching techniques that emerge as useful or necessary for specific language profiles or identities within a diverse classroom?

1.5   The Community Interpreting Certificate at Viterbo University

The beginning of the Community Interpreting Certificate at Viterbo University coincided closely with national efforts in the United States to professionalize and standardize the discipline. A community assessment revealed that despite a continuous influx of limited English proficient populations (largely migrant workers) in the tri-state region of Wisconsin, Minnesota and Iowa, there were no interpreting training programs in Southwestern Wisconsin. Without accrediting institutions or a central source from which to find language access services, employers in the area (dairy farmers, meat packing plants, factories, etc.) were unprepared to (1) communicate effectively with their employees and (2) evaluate a language interpreter's skills and qualifications. As is often still the case throughout the world and across the US, children and family members largely served as the solution for language access when it came to bridging the gap between limited English proficient community members and service providers (see Antonini, 2010; Valdés, 2003). Without training or affiliation with supporting professional associations, these community ad hoc interpreters were also not committed to community interpreting as a professional field of work and study. Furthermore, there were (and remain today) many public misconceptions about community interpreting itself, especially considering anti-immigrant sentiments and 'English Only' movements that have prevailed in US contexts in recent decades (Lawton, 2013) and may have further contributed to the low prestige of interpreting in community contexts.

In response to this layered socio-economic and political conundrum, the socio-cultural specifics of market demands, federal language access mandates and state programing, Viterbo University launched its 13-credit Spanish <> English Community Interpreting Certificate in 2010. The main objective of the program was to train bilingual community members to provide ethical and professional language access to service providers and residents of limited English proficiency. The vision was that Viterbo could, in this way, serve as a resource center for social and linguistic justice for the Spanish-speaking community in the tri-state region. In addition to honing the linguistic skills of community members, these bilingual students would also be trained in

translation and interpreting theory, codes of ethics, standards of practice, cultural humility[11], and professional skills. In this way, well-trained, local interpreters might establish positive working relationships with community partners in the fields of legal, health, education, government, and social services. By forging public trust and more awareness about the profession, community stakeholders might begin to understand how community interpreting could lead to healthier, more equitable communities.

In the first five years of the Community Interpreting Certificate at Viterbo, under the direction of Vicente Guillot, co-founder[12] of the program, 17 students completed the certificate. As the local community of bilingual ad-hoc interpreters quickly became more educated in language access, and the demand for trained interpreters was filled by recent graduates in the community, it seemed that saturation had been reached in terms of language access supply-and-demand in the small city of La Crosse, Wisconsin. By 2015, the continued recruitment of interpreting students proved evermore challenging, and the direction of the program came under my purview. With a change in administration of the program and only three White interpreting students in the graduating cohort, closure of the program appeared imminent.

With a need to pivot in terms of strategy and focus, the decision was made to re-direct recruitment efforts toward bilingual heritage speakers of Spanish in the area high schools who were able to participate in the Early College Credit Program of Wisconsin, a program that allows students enrolled in Wisconsin high schools, to enroll in courses at higher education institutions for little to no cost (Wisconsin Department of Public Instruction, 2024). The first Spanish-speaking heritage learner from an area high school participated in the program in 2017[13]. However, even as the number of Latino/a/e students enrolled in the interpreting program from 2015-2017[14] increased at the beginning of each academic year, only 33% of those Latino/a/e

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[11] The University of Oregon (n.d.) defines cultural humility as "… a practice of self-reflection on how one's own background and the background of others, impact teaching, learning, research, creative activity, engagement, leadership, etc.". The notion of cultural humility is woven throughout the curriculum of the Community Interpreting Certificate at Viterbo University with the objective of honoring the principals of diversity, equity, inclusion, and social justice. For additional definitions of this term, see the following webpage: https://inclusion.uoregon.edu/what-cultural-humility-basics.

[12] This program was envisioned, proposed, and co-founded by Vicente Guillot, Dr. Melissa Wallace and Dr. Maribel Bird within the Spanish Department at Viterbo University in 2009.

[13] Since 2017, twenty-three high schoolers have graduated from the program.

[14] The first three years that I was in charge of the program.

students graduated as opposed to 84% of their non-Latino/a/e classmates, a reality that begged the question of white privilege[15]. Thus, it became urgent to inquire about more effective ways to retain students in this program, especially Latino/a/e students who were demonstrating higher rates of attrition.

While Hispanic enrollment in US universities and colleges has more than doubled in the past few decades, financial constraints often affect graduation rates (Mora, 2022). Despite being the biggest and fastest-growing minority group in the US, the gap in degree attainment between Latino/a/e and White, non-Hispanic cohorts of full-time students was approximately 14% in 2009 (Santiago & Soliz, 2012). Extensive research has shown that the unequal socio-economic realities of underrepresented students (often low-income, students of color) can begin to emerge as literacy and performance gaps even before formal schooling begins and present real challenges to these students' academic success in the long-term (García & Weiss, 2017; American Psychological Association, 2017). Further illustrating the financial aspect of socio-economic inequities and their effects, in 2020, seventeen percent of Hispanics in the US, were reported to be living in poverty as compared to 8.2% of non-Hispanic Whites (Shrider, 2021). Since income in the United States is correlated to educational opportunity, it is not surprising that we see unequal outcomes in terms of college enrollment, attrition, and graduation rates.

Immigration status is also an important demographic to account for in Viterbo's interpreting program. About twenty-six percent of surveyed students from 2015-2022 had an immigration status other than US citizen (ten percent undocumented, seven percent Differed Action for Childhood Arrival (DACA)[16] status, five percent permanent residents, two percent holding a U-Visa and two percent with a J1-Visa, adjusting to permanent resident). Especially for undergraduate students of DACA or undocumented status, there is a lack of intentional mentoring programs, well-trained faculty, and staff to work with these students, uniform policies

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[15] White privilege may be understood as White people having more access to power and resources than people of color who are in the same situation (Kendall, 2012).

[16] DACA recipients are those who entered the US "unlawfully" under the age of 16, have had continuous residence in the US since June 15, 2007, and met all other eligibility requirements according to the executive order placed into effect under the Obama administration (U.S Citizenship and Immigration Services, 2024). While this status grants previously undocumented individuals the legal right to work and have a social security number, these individuals are also at risk of the temporary executive order being revoked at any time, returning them to an undocumented status.

and institutional commitment to their success in higher education (Gámez, Lopez & Overton, 2017). While individuals of any immigration status may enroll in the Community Interpreting Certificate at Viterbo, restrictions in terms of work beyond the program may remain an obstacle for some[17]. Understanding the stakes of this immigration landscape within the program is important to understand the need for this program in the community, the effect it is having in underrepresented local communities and the social, economic, and political inequities that continue to exist along immigration divides.

Furthermore, while interpreting scholars and practitioners argue that community interpreting plays an essential role in providing basic human rights such as quality healthcare and other public services, monolinguistic ideologies remain deeply embedded in US institutions, creating unequal power dynamics between those with more cultural and linguistic agency and those with less (Berger & Peled, 2022). Take for example, the fact that although the United States does not have an official language, English has been established as the political, scientific, economic, and cultural 'lingua franca,' since it is the language most widely used within US borders (USAGov., 2023). As such, the term "limited English proficient," itself, used frequently within the fields of ITS, in US government documents and even in common vernacular (as well as throughout this doctoral thesis), arguably reflects and maintains historically minoritized populations in an inferior socio-cultural category (Peled, 2018; Martínez et al., 2021). In short, the movement toward more linguistic equity and justice in the United States remains a work-in-progress.

Despite the challenges that many interpreting students of this program face in completing Viterbo's Community Interpreting Certificate, particularly those of underrepresented identities, a desire to become a well-trained community interpreter is a common denominator for most of these undergraduates. Since 2015, enrollment in the program has grown along with retention,

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[17] Undocumented students, for example, may not be able to gain access to "legal" work in the US after completing the program. To make a living, these individuals often seek loopholes in the law and/or alternative methods for obtaining work in area businesses, farms, meat-packing plants, factories, etc. In the US, undocumented individuals can open a bank account with an Individual Taxpayer Identification Number (ITIN) (Bellamy, 2007). This allows those without documentation to purchase property such as a vehicle or a home, or even own a business. Thus, with the correct training and tools, such individuals may find ways to work free-lance as an interpreter in the community, creating their own networks, invoices, and business practices. While permanent residents and some visa holders do have a right to work and a pathway to citizenship, neither DACA recipients nor undocumented individuals have access to citizenship without a change to immigration status.

with sixty-nine students who have demonstrated their perseverance, resilience, and grit by completing the certificate. Eighty-four percent of students who enrolled from 2019-2023 were retained. Of those graduates, 66% were Latino/Hispanic and 22% non-Hispanic. The retention rate for Latinos/Hispanics in these years was 82% (a 49% increase since 2017), and for non-Hispanics, 91% (7% increase from 2017). Inevitably, these shifting demographics and retention rates are significant and have required corresponding changes in teaching methods and program administration.

1.5.1 Mixed language profiles in the classroom

While the Community Interpreting Certificate at Viterbo was changed to a non-language specific program in 2017, 97% of the sixty-two graduates from 2015-2023 had a Spanish <> English language pair. Sixty-five percent of graduates identified as Latino/a/e with countries of origin or Hispanic heritage from Colombia, Mexico, El Salvador, Guatemala, Venezuela, Puerto Rico, and the United States. Of these Spanish/English speakers, their language profiles can be grouped into three major categories: 13% English language learners (ELL), 33% Spanish language learners (SLL), and 53% heritage learners (HL) of Spanish. Language learners (or elective sequential bilinguals) are students who learned either Spanish or English more formally as a second language (L2) later in life. Heritage speakers of Spanish in the United States are individuals growing up in contexts where Spanish is spoken and who are, to some degree, bilingual in English and Spanish (Valdés, 2000). Indeed, the cultural and linguistic landscape of Spanish-speakers in this program is in many ways reflective of the backdrop of Spanish culture and language in the United States, with its wide spectrum of Spanish language diversity and proficiency levels across class, race, and countries of origin.

Since heritage speakers of Spanish face specific challenges in speaking Spanish in US educational contexts, it is necessary to briefly acknowledge how this might affect the CI classroom. Just as Spanish language courses have traditionally been geared toward L2 learners in US education (Carriera, 2016), interpreter education also largely focuses on students who learn their second language after childhood. A documented lack of teaching materials developed for training in which both heritage speakers and L2 learners share the classroom (Carriera, 2016) has

led to calls for further inquiry as to how the skill sets of specific language profiles may improve interpreter education (Mellinger & Gasca-Jimenez, 2019).

As such, a growing body of scholarship has begun to underscore the experience and needs of heritage speakers who have interpreted informally in their youth (Valdés, 2003; Angelelli, 2010; Angelelli, 2016; Martínez-Gomez, 2020; Napier, 2021), which may motivate more inclusive interpreter education that values the lived experiences and skills that heritage speakers bring to mixed classrooms. Lozano Argüelles and Martínez-Gómez (2023), for example, are currently carrying out a research project with the Center for Integrated Language Communities (CILC) under the larger Institute for Language Education in Transcultural Context (ILETC) that aims to identify best practices for teaching interpreting for heritage language learners (HLLs) and redesign interpreting courses with the bilingual profiles and previous translation experiences of heritage learners in mind. This preliminary work recommends that interpreting instructors build on HLLs' strengths by scaffolding assignments progressively from what they already have mastered in their informal lived experiences with language and culture toward more formal language and contexts. Furthermore, this work suggests building on sociolinguistic awareness that empowers HLLs to gain confidence and motivation to continue developing their heritage language skills (Lozano Argüelles & Martínez-Gómez, 2023). As this project is slated to disseminate new materials and their impact on 'heritage interpreters' by 2026[18], more research on how to best teach to the needs of all students within classrooms of mixed language profiles is necessary. The desire to invest meaningfully in teaching strategies that uplift the heritage speaker may thus empower traditionally underrepresented students and eventually translate to more unified communities of language professionals in the United States.

1.5.2 Implementing high-impact practices (HIPs) and mentorship into the community interpreting curriculum

Given the calls in ITS to bridge theory and practice (Hale, 2007; Angelelli, 2008; Pöchhacker, 2010; Wadensjö, 2011; Cirillo & Niemants, 2017), the Community Interpreting Certificate at

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[18] For details on the 'Heritage Interpreting' project being carried out under the Center for Integrated Language Communities (CILC) and the Institute for Language Education in Transcultural Context, see the following webpage: cilc.commons.gc.cuny.edu/heritage-interpreting/

Viterbo University aims to balance practical skill training with the theoretical underpinnings of the field by incorporating research into the curriculum. The student learning outcomes (SLOs) of this program are to train non-professional interpreters to (1) understand the conceptual and theoretical framework of interpreting as a profession, field of study and practice; (2) execute effective interpreting skills in the consecutive, simultaneous and sight translation modes; (3) build language-specific lexical resources; (4) analyze major cultural and ethical dilemmas that interpreters encounter; and (5) develop interpersonal support networks necessary to navigate the professional field. To achieve these goals, the program has implemented high-impact practices as the primary methodological approach in the classroom.

High-impact practices are research-based pedagogical approaches that have proven to be an exceptional way to foster undergraduate student success and retention (Kuh, 2008). This is particularly evident for historically underserved demographics in colleges and universities (American Association of Colleges and Universities, 2023), like the Latino/a/e students who have made up the majority demographic of the cohorts in the community interpreting certificate in recent years.

In addition, the role of effective mentorship is explored in this work as a means to boost retention and student success within this academic undergraduate certificate. The personal and professional networks forged within this academic undergraduate certificate also aim to support graduates' professional endeavors beyond the program. A discussion of the results of these strategies are discussed at length in the conclusion of this dissertation.

1.6   Methodology

Each article of this thesis (Chapters II, III, and IV) includes the detailed and specific methodological information necessary to conceive each isolated study. In this section, the methodology is briefly explained as an overview.

In general, the research design employed in this work was descriptive, exploratory, and inductive in nature. Action research approaches were pervasive in this work considering the positionality

of the researcher, who was also the professor of the students studied here and the administrator of the entire program. While current ITS research encourages action research (AR) with the aim of studying teaching and practice, it also underscores the importance of careful design and implementation when carrying out such methods, keeping in mind the subjectivity of such work (Angelelli & Baer 2016). Since AR is an approach that is often used in educational research, and frequently with the goal of curriculum innovation (Hale & Napier 2013), it has been employed in this thesis for the purpose of program assessment for Viterbo University's Community Interpreting Certificate program.

Articles I and II employ the strategy of survey research to collect data. In article I, surveys were disseminated before and after students carried out undergraduate research, with the objective of comparing results and tracking students' perception over time. In article III, surveys were distributed one time to both students and community partners who had been in contact with the interpreting program over an 8-year period to learn more about their perceptions on teaching methodologies, curriculum components, mentorship, and the effect of the program in the community.

Article II exhibits a more observational approach, since role-plays were observed 'naturally' as they played out in the classroom. However, it must be understood that this study might also be considered a 'quasi-experiment' in that the activity was a *simulation* of a real-life interpreting scenario. Because there was neither manipulation of independent variables nor control groups, this case-study might be considered a pre-experiment for the purpose of future, more controlled studies.

Mixed methods were utilized to analyze the data for all articles presented here, with an emphasis on the qualitative. Role-play transcripts (Article II) or open-ended survey questions (article I and III), for example, were quantified in some ways, however, the analysis of the numerical data was a subjective interpretation of the results. Using both qualitative and quantitative analysis to understand information from multiple studies on the same interpreting program helped to triangulate the data for a more complete picture of what was happening within this curriculum.

Given the highly interpretive nature of this work, such methods are generally considered appropriate within the discipline of ITS (Pöchhacker, 2016).

1.7   Structure of this Thesis

The introduction (Chapter I) of this dissertation by compendium of articles includes a more lengthy literature review than what was permitted in terms of word limits in the three journals where the articles were published. It also aims to contextualize the Community Interpreting Certificate Program at Viterbo University in time and space. In this first chapter, the objectives, research questions, and overarching methodology of this work are laid out before the three articles (Chapters II, III, and IV).

Chapter II (article I), *Undergraduate action research as a high-impact mentorship practice in community interpreting studies,* was published in the journal *Hermeneus* in 2023. This publication aims to present students' perceptions of learning when reflecting on the high-impact practice of carrying out undergraduate action research projects on interpreting in their own communities. High-impact practices, endorsed by the Association of American Colleges and Universities (AAC&U) are defined as educational opportunities that are time-intensive, aide the learning process beyond the classroom, entail significant connections with faculty and students, foster interpersonal collaboration with diverse individuals and offer regular and meaningful feedback (Kuh, 2008). Kuh outlines that such pedagogical approaches may include collaborative projects, learning communities, undergraduate research, service learning, and studying abroad, all of which promote deep learning and a variety of positive outcomes for undergraduate students.

HIPs such as undergraduate research, which emphasize student-faculty research partnerships, have proven to be particularly effective when it comes to retention and student success for first-generation, low-income students and those who belong to underrepresented minority groups (Nagda, et al., 1998; Kuh, 2008; Brownell & Swaner 2009b; Olson-McBride, et al., 2016). Since this program suffered historically from high attrition rates for Latino/a students

(Pinzl, 2018), undergraduate research was implemented as a high-impact practice to boost Latino/a student retention and success.

Chapter III (article II), *Non-Scripted Role-playing with Heritage Speakers and Second Language Learners in the Medical Interpreting Classroom*, was published in *Translation and Translanguaging in Multilingual Contexts* in 2024. This publication examines an interprofessional education collaboration via role-playing in Viterbo's Clinical Simulation Learning Center. Nursing, social work and pre-medical students were given the health-professional roles of caring for limited English proficient community members (who acted as 'patients'). Interpreting students, both heritage speakers of Spanish and second language learners (L2) of both English and Spanish, facilitated language access for all parties involved. Recordings of these dialogues were then transcribed, annotated, and analyzed via mixed methods. This study examines overall and comparative findings of how heritage speakers and second language learners interpret dialogue, focusing on the textual aspects (Wadensjö, 1998) of their exchanges. While no language profile seemed to perform particularly better overall, certain indicators were more problematic for L2 Spanish speakers and/or heritage speakers. The presentation of these results and conclusions intended to foster improved teaching interventions for classrooms with students of varying English <> Spanish language backgrounds.

Chapter IV (article III) of this thesis, *Professional and social impacts of Viterbo University's undergraduate community interpreting certificate program: Perceptions of recent graduates and community partners*, was published in *The Interpreter's Newsletter* in 2023. This article aims to position interpreters, even those classically considered "non-professional" as powerful community agents—instruments of cultural, ideological, and political change because they leverage their lived experience as a direct contribution to linguistic justice. Data collected via surveys of recent graduates and community partners were examined via mixed methods to inquire as to how elements of the Community Interpreting Certificate curriculum may (or may not) have influenced graduates' lives as professionals beyond the program. This research also sought to assess the quality of the interpreting program at Viterbo.

2. Article I: Undergraduate action research as a high-impact mentorship practice in community interpreting studies[19]

2.1 Introduction

The main objective of this study is to present students' perceptions of learning when carrying out their own undergraduate action research projects within the skill-based Community Interpreting Certificate at Viterbo University. The literature review of this paper examines undergraduate research as a High-Impact Practice (HIP) within higher education in the United States. Situated within a gap in the literature, this study explores how HIPs affect the *quality* of student learning. Mentoring is then explored in terms of professor-student developmental relationships that guide undergraduate research, especially for underrepresented minority students. Both HIPs and mentoring are also examined through the lens of translator / interpreter training. The main characteristics of this pedagogical mentoring practice and the methodology of this case study are then described. By way of mixed methods, this paper discusses the results of student self-assessments at both the beginning and the end of their projects. Finally, we draw conclusions and consider the limitations and future avenues of research and application.

It is important to underline that the instructor, research mentor and author of this paper has analyzed the experience of twelve interpreting students with the understanding that mentoring is reciprocal in nature. These students represent a range of perspectives and identities in terms of country of origin, dominant language, age, educational background, etc. A White, middle-class, university instructor and scholar, who grew up in US suburbia, cannot attest to the lived experience of students (both Latino/a and non-Latino/a) that carried out these initiatives on their own, and mostly within rural communities. Furthermore, a professor in this role must be humbled by the students' vision and clarity in their own action research, learning from the

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[19] Pinzl, M. M. (2023). Undergraduate action research as a high-impact mentorship practice in community interpreting studies. *Hermēneus. Revista de Traducción e Interpretación*, (24), 445–481. https://doi.org/10.24197/her.24.2022.445-481

challenges that the students face when they ask questions about the context of their own lives. Indeed, teachers and mentors in such privileged roles may become, in many moments of the research process, the mentees themselves.

2.2 Literature review

2.2.1 Undergraduate research as a high-impact practice

High-Impact Practices (HIPs), endorsed by the Association of American Colleges and Universities (AAC&U) are defined as educational opportunities that are time intensive, aide the learning process beyond the classroom, entail significant connections with faculty and students, foster interpersonal collaboration with diverse individuals and offer regular and meaningful feedback (Kuh, 2008). Kuh outlines that such pedagogical approaches may include learning communities, collaborative projects, service learning, studying abroad and undergraduate research, all of which promote deep learning and a variety of positive outcomes for undergraduate students. Though many of the effective educational opportunities here described as High-Impact Practices have been implemented in higher education for decades, Kuh's work (2008), which coins the term *High-Impact Practices*, is based on data obtained from the NSSE (National Survey of Student Engagement). In an effort to combat low enrollment and unstable retention at US universities today, Kuh's work led institutions to apply High-Impact Practices into their university curriculums more strategically.

While Kuh and others have repeatedly demonstrated that HIPs such as undergraduate research lead to positive outcomes for both students and institutions of higher education, additional recommendations suggest bolstering that impact by thoughtfully designing projects to match program and institutional culture and objectives (Brownell & Swaner, 2009a). Though studies around the success of HIPs have focused on retention and success as measured by grade-point average, the literature also indicates a need for studies to move beyond grades, persistence, and completion, to focus also on the *quality* of student learning (Kuh, 2008; Brownell and Swaner, 2009a). This project empirically measures the implementation of undergraduate action research as a High-Impact Practice in an interpreting curriculum to gage how students perceive their learning process. This project was also intended to serve as a model for embedding more

research into the humanities at Viterbo University, enhancing a culture of academic rigor across disciplines, and intentionally including students of diverse backgrounds in undergraduate research.

HIPs such as undergraduate research, which emphasize student-faculty research partnerships, have proven to be particularly effective for the retention and success of first-generation, low-income students and those who belong to underrepresented minority groups (Nagda, et al., 1998; Kuh, 2008; Brownell & Swaner 2009b; Olson-McBride, et al., 2016). One study, examining the cumulative impact of five categories of HIPs (service learning, internships, senior experience, research with faculty and study abroad), found that Latino/a students who participated in three or more of these High-Impact Practices were 35% more likely to graduate on time than Latino/a students who did not carry out any of these HIPs. Furthermore, the retention of Latino/a students in this study was greater than the non-Latino/a students who had carried out three or more High-Impact Practices (Huber, 2010). Huber's work encouraged the implementation of undergraduate research projects into the Community Interpreting Certificate at Viterbo, since most of the participating students self-identified as Hispanic or Latino/a. Moreover, Viterbo's program had suffered from a historically high attrition rate for Latino/a students, specifically (Pinzl, 2018). Between 2014-2018, for example, 38% (13 of 34) of students who enrolled in the program did not complete it. When broken down by ethnicity, the attrition rate of Latino/a students was 58% (11/19) as compared to 13% (2/15) of non-Latino/a students. Undergraduate research was therefore implemented as a High-Impact Practice in this program to boost Latino/a student retention and success.

As Kilgo & Pascarella (2016) indicate, undergraduate research has been studied since the 1990s in terms of both cognitive-related and educational attainment outcomes. However, when examined within the more recent framework of High-Impact Practices, some authors suggest that undergraduate research contributes specifically to improved retention rates, academic performance, student satisfaction and engagement in the classroom (Brownell & Swaner, 2009a; Olson-McBride, et al., 2016). Indeed, these authors assert that undergraduate research encourages the development of research skills, proves to aide students in problem solving, and boosts both their satisfaction and active engagement with their academic experience.

The type of undergraduate research chosen for implementation in this interpreting program was action research (AR). Student engagement in AR projects with university instructors seems to foster the faculty-student relationship (Moore & Gayle, 2010), encourage student voices to be heard, support developmental growth and potentially enhance the curriculum (Kur, et al., 2008). As explained by Sagor (2010), AR can be used for 'micro' level projects that aim to focus on student learning attributes or for 'macro' level projects aiming to examine institutional-level or program issues. This action research study was carried out at Viterbo to investigate issues on both the micro and macro levels of the Interpreting Certificate with two major objectives. On the micro level, this initiative aimed to foster a developmental student-faculty mentorship relationship to boost students' confidence as both aspiring practitioners and interpreting researchers. Since faculty members who implement undergraduate research into their curriculums are also urged by HIP scholars to "provide mentoring rather than just program oversight, and attend to the quality of the mentoring relationship (balancing challenge with support)" (Brownell & Swaner, 2009b), mentoring was also considered in this curriculum component. On the macro level, the objective was to incorporate undergraduate research as a strategy for student retention and success in the 2018-19 academic year, considering the historically high rate of attrition (particularly of Latino/a students) within the program. While the first goal intends to aid students' developmental growth and academic success, the latter intends to boost the success and quality of the interpreting program at Viterbo.

Strategies such as mentoring students through undergraduate research within interpreting studies, were intended, therefore, not only help to give more social capital and confidence to the students who participated, but also serve to foster more spaces of equity and social justice within both academia and communities beyond the institution.

2.2.2 Mentorship: definitions and approaches

Research on High-Impact Practices (particularly in terms of student-faculty research partnerships) intersects with literature on mentorship in that both point to the enhancement of student retention and success (Newton & Wells-Gloer, 1999; Jacobi 1991; Nagda et al., 1998).

Before examining this intersection, however, a brief overview of definitions and approaches as related to mentorship is merited.

Since the mid-1970s, mentoring research has focused primarily within the areas of education, the workplace (Merriam, 1983; Kram, 1985), youth and psychology (Jacobi, 1991; Eby et al., 2008). Consequently, a variety of ways to think about mentorship have emerged, which include, but are not limited to: peer-mentoring, e-mentoring (Ragins & Kram, 2007), multiple mentoring (Patel, 2017), reverse mentoring (Murphy, 2012), formal (structured, organizational or institutional) and informal (organically formed, personal) mentoring (Izner & Crawford, 2005).

Despite a range of mentoring approaches, there is also an apparent lack of consensus on how to define mentoring itself. Widely- held understandings of the term within education, management and psychology entail hierarchical, one-on-one developmental relationships between an individual with less experience (the mentee or protégé) and an individual with more experience (the mentor) (Jacobi, 1991; Zellers et. al, 2008). Similarly, the classic understanding of faculty-student mentorship relationships is one in which the professor takes on the role of 'mentor', who teaches and guides the student (or 'mentee'), both academically and personally (Jacobi 1991). The faculty-student research relationship carried out in this study, may in some ways exemplify the above classical definitions of mentorship. However, these one-directional visions fall short of describing reciprocal developmental relationships, particularly when mentoring across difference (whether cultural, racial, ethnic, generational, etc.). Zellers et al. lay out a more contemporary view of mentorship as "a reciprocal learning relationship characterized by trust, respect and commitment" (2008: 555). Similarly, Hinton et al., push back on hierarchical mentorship conceptualizations from the lens of Critical Race Theory, suggesting that these models are "maintained as a pipeline for White men to maintain a position of power within existing institutions" (2009: 188). Instead, these authors endorse an inclusive multicultural mentoring model that fosters and acknowledges differences. With the aim of encouraging those of ethnic minority groups to participate in mentoring, Williams & Schwiebert underline dialogue between mentors and protégés as something that is bi-directional when it comes to learning and growth, explaining that,

"When the mentor and protégé view each other as individuals in the process of development rather than as superiors or subordinates, the power and hierarchy are diminished and may be replaced by collaboration and openness" (2000: p. 61).

Others have also outlined collaborative mentoring, based on open communication, and establishing both a space for continuous group learning and a culture of experimentation (Buck, 2004). In the case of the Latino/a interpreting students studied here, mentorship was understood as a dynamic process and a learning partnership built on trust, reflecting a reciprocal, though often asymmetrical relationship between individuals (faculty, students, or otherwise) that participated in the Community Interpreting Certificate in the spring of 2018.[20]
In this Community Interpreting Certificate, where most students identify as Latino/a, it is essential to look at mentoring across difference. It should also be noted that the White faculty member in this study was working to form developmental relationships with both White and Latino/a students. As Hinton et al. also suggest:

There is no one-size-fits-all mentoring approach … faculty's and students' backgrounds and experiences have to be considered when trying to make all feel valuable and valued… We encourage those already empowered to lend their power and visibility to help students of color feel connected, despite being continually and systemically marginalized in the classroom and in other university environments." (2009: p. 200).

Indeed, several fundamental frameworks were considered when mentoring interpreting students of diverse backgrounds in this study. Within the literature on mentoring in the workplace, Kram (1985) asserts that mentoring can function to enhance career and psycho-social development of both mentor and mentee. While career-related functions of a mentor-mentee relationship revolve around themes of coaching, protection, exposure, visibility and challenging assignments, psycho-social functions are focused on affording a role-model, acceptance, confirmation, counseling, and friendship. Zellers et al. (2008) further define the roles of mentors in both of Kram's

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[20] This definition is inspired by the intense literature review of mentorship definitions put forth by Tammy D. Allen and Lillian Turner de Tormes Eby (2007) in the book *The Blackwell handbook of mentoring: a multiple perspectives approach*, (p.10). See reference list for full source information.

function categories. In terms of career-related functions, they assert that mentors become sponsors (guiding, protecting, opening doors, and making introductions) or coaches (teaching, challenging, and providing feedback). As for psycho-social functions, these authors affirm that mentors become role models (demonstrating behaviors, attitudes, and values) or counsellors (providing support, advice, and coping strategies).

2.2.3 Mentoring in interpreting and translation

While students can generally count on academic support within an institution of higher education, the functions of mentorship within the realms of career promotion and psycho-social support may not always be evident. This is the dynamic role that the instructor tried to fulfill in this study, in order to lead students through their action research, serving in the roles of coach, career builder, and role-model in different stages of the research project. In the capacity of mentor as coach, the instructor in this study was teaching, challenging and providing feedback throughout the processes of research topic selection, research proposals, writing, survey creation, data analysis and dissemination of results in the form of a conference poster presentation. As a career builder, the instructor was guiding students into community spaces where interpreting is either carried out or needed, and aiding students in professional networking in the community. As the psycho-social propeller, the instructor was role-modeling how to present at a conference by organizing the culminating undergraduate research conference event where students presented their results, confirming their hard-work and counseling them beyond their fear of presentation and failure. In essence, the dual role of instructor and research mentor in this project was established through a variety of mentorship methods, effectively balancing challenge and support as recommended by Brownell and Swaner (2009b).

Within the parameters of community interpreting studies education in the US, however, there is still room for empirical research on mentorship. Sign language interpreting does provide some guidance when it comes to mentorship and mentorship models (Clark, 1995) as well as literature related to mentoring via distance delivery (Witter-Merithew et al., 2002). However, though it seems logical that mentoring would come up in other studies related to work placements and university-industry collaborations within interpreting and translation programs, such parallels

often go unmentioned as observed, for example, in an article by Jaccomard (2018) on work-placements at the University of Western Australia. Moreover, Saldanha (2019), describes the lack of mentoring she perceives within translation programs in Europe, as students move toward a professional career, and underlines the gap that exists from her perspective, between academia and the profession. One comparative study carried out in Catalonia, Spain, points to an effective multi-mentoring model that connects translation and interpreting studies students strategically and methodically to freelance professionals (Olalla-Soler, 2018). In a similar vein, D'Hayer (2013) describes the need for "communities of practice," both virtual and otherwise, when training public service interpreters. Such "communities of practice" incorporate the influence of a broad spectrum of stake holders from which public service interpreters may learn. Within educational settings for public service interpreting, D'Hayer proposes that "alumni can be presented as mentors who have experienced the curriculum and moved forward in their professional development" (p. 336). While mentorship has been explored in a limited amount of studies within interpreting and translation, literature as related to undergraduate research as a mentorship tool is yet to be extensively studied.

Finally, it should be noted that several other types of mentorship beyond the student-faculty relationship were present throughout this undergraduate research initiative, reflecting a collaborative, intercultural and multi-mentor model. Students did not interact with the instructor alone in the project, since part of the assignment required them to work within their communities, building networks beyond the academic institution both in terms of stakeholders and practicing community interpreters. Stakeholders in the community such as medical professionals, interpreters at local hospitals, judges, police officers, lawyers, farmers, librarians, and real estate professionals were some of the spheres of influence that also provided information and guidance around language access to inquiring undergraduate researchers. Furthermore, peer-mentoring, and intercultural mentoring through students' research teams may have influenced students as they worked collaboratively with diverse others, dialoguing and leaning on one other both inside and outside the classroom. Finally, as mentioned previously, the unique mentoring partnership between instructor / research mentor and students was bidirectional.

2.3 Methodology

Action research (AR) was chosen as the research method for this initiative, with the intent of carrying out reflective practice in interpreting education. Such reflective practice in AR within the realm of teaching language has been defined in terms of four key stages: (1) the teacher reflects on their teaching and creates a plan for improving a problem, (2) the teacher conducts research to gain perspective, (3) the teacher analyses the results through observation, and (4) the teacher reflects and plans for further action (Burns, 2010). In identifying a high attrition rate for Latino/a students as well as a perceived gap between theory and practice in the field of interpreting, implementing an undergraduate action research project into Viterbo's Community Interpreting Program was an attempt to remediate these problems.

However, the focus of this article is on how students' action research projects within the Community Interpreting Certificate curriculum were implemented, carried out and perceived via students' self-assessment. In essence, this paper is an examination of action research (carried out by students) within action research reflective practice (carried out by the instructor).

2.3.1 Undergraduate action research in the interpreting curriculum

Though action research (AR) appears across a plethora of disciplines and professions, it is generally characterized with the objective of both "benefiting the research participants, who are often service users, and providing professional development for practitioners" (Gibbs et al., 2017). In the case of Latino/a Community Interpreting Certificate students at Viterbo, most had served as interpreters throughout the course of their childhood or had witnessed their immigrant family members in need of language access services, leading them to become what Gibbs et al. outlines as "insider-researchers" (2017: pp. 11-12). Indeed, the literature cites that AR can be used as a tool to explore social justice issues, and / or as a tool for student engagement that leads students to a deeper understanding of community, especially when it comes to co-collaborative projects that involve community stakeholders (Moore and Gayle, 2010; Gibbs et al., 2017). Furthermore, AR has demonstrated enhanced community engagement as well as heightened intellectual, social and emotional engagement on the part of students (Pain et al., 2013). Since language access for limited English proficient individuals in the US is a question of social justice, assigning AR projects to interpreting students was implemented with the intention of

helping students make connections between their skill sets and the need for their services locally, ultimately fostering their engagement in their own communities. Finally, AR has shown to improve the connection between theory and practice (Katsarou & Tsafos, 2013), which was another important student learning objective of the Community Interpreting Certificate at Viterbo.

To create a manageable timeline for student projects, the semester was laid out in three stages and aligned with the student learning outcomes (SLOs). In stage I (Theory and Literature Review), students were introduced to research and introductory concepts about community interpreting (textbooks, academic articles, codes of ethics and standards of practice, etc.). This stage was linked to the following SLOs for the Community Interpreting Certificate: (1) Obtain a conceptual and theoretical framework of interpreting as a profession and as a field of study; (2) Acquire a basic understanding of the current reality of community interpreting and potential corresponding dilemmas.

In stage II (The Study of Techniques and Methodology), alumni visited the classroom to explain their research questions, methodology and results of their project the previous year. As a peer mentor, this was intended to give prospective undergraduate researchers an idea or a roadmap for what would lie ahead, motivating them to envision a successful project. Students were then made to envision where else in their communities they wanted to learn more about language access, deciding on six sectors: dairy farms, pharmacies, the Department of Natural Resources (DNR), dentist offices, real estate, and libraries. One student surveyed the DNR because they knew that in their hometown there were problems around communication and the law when it came to hunting in their rural county. Another student chose pharmacies in their city because as a recent immigrant, they remembered the difficulty in obtaining medications and understanding directions for taking them at the local drug store when they first arrived. Students worked in groups of 3-4 to formulate research questions and write a simple research proposal, including their proposed methodology and expected results. This research stage was tied to the following program learning objective: to develop the support networks necessary for students to analyze and confront the major dilemmas professional interpreters are faced with in the field today.

In stage III (Research, Analysis and Dissemination), students then developed and distributed questionnaires designed to answer their research questions, before compiling and analyzing the data. With conclusions about language access in their communities, and in alignment with Brownell and Swaner's (2009b) High Impact Practice recommendation to "provide opportunities for 'real-life' applications (of undergraduate research), whether through publication, presentations, or project implementation (n.p.)" students were then required to make a poster to present their work at a professional interpreting conference. Attendees of this event were interpreting practitioners, working in the community. By contributing information about interpreting services in the region, interpreting students engaged with their future interpreting colleagues while gaining personal, professional, and academic skills. This stage was linked to the following Community Interpreting Certificate learning objectives. Students would: (1) achieve refined linguistic skills, in English and secondary language via professional speaking and writing. (2) analyze cultural and ethical issues to encourage appreciation, respect for differences, and effective communication within the field of community interpreting (3) become effective communicators and advocates in community interpreting settings.

2.3.2 Student subjects

The level of education, age, and life experience of the twelve interpreting students studied here varies considerably. This interpreting program works closely with area high schools to encourage highly bilingual heritage speakers[21] of Spanish to take college courses that will give them a boost toward a professional career upon high school graduation, accounting for the five students in this study who had not yet earned their high school diploma. Two other students had not studied beyond high school and the remaining students had either earned an undergraduate or Master's degree, or were working to obtain one. Since many of the students enrolled in the program were high schoolers or still completing their undergraduate degree, it is logical that two thirds of students were completing formal action research for the first time.

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[21] For the purpose of this study, we will base our use of the term 'heritage speaker' on the following widely used definition: "a student who is raised in a home where a non-English language is spoken, who speaks or merely understands the heritage language and who is to some degree bilingual in English and the heritage language" (Valdés, 2000: p. 1).

Additionally, 58% of students (7 of 12) participating in this study self-identified as Hispanic or Latino/a. Of these seven students, 6 had little to no experience with university coursework before enrolling in the program. A significant number of participating students were also 'underrepresented' in that they were first-generation, low-income students. Therefore, while mentoring methods were generally the same for all students, the mentorship literature detailed previously in this paper confirms that that mentoring should be tailored to each student, taking difference into account. Given the limited participants in this study, the results are thus explored in aggregate rather than by ethnicity.

2.3.3 Mixed method analysis

While students worked to carry out their projects, they were also being surveyed by their instructor / research mentor to assess their perceptions about their research experience and how those perceptions changed over time. Before beginning the project, the author of this paper consulted the Institutional Review Board (IRB) at Viterbo University to assure that all questions of ethics regarding human subjects were considered. It was esteemed that the project did "not satisfy the (US) federal definition of Human Subjects Research (HSR) because it is not *designed to develop or contribute to generalizable knowledge*" and therefore did not need official IRB approval.[22] The study was instead characterized as a Quality Improvement (QI) project. Consent forms were, however, still distributed to participating students, informing them that completing the surveys was optional and that their answers would not affect their grade.

Students were then given two surveys: (1) at the beginning of the semester, after having formulated their proposal and (2) after they had completed the presentation of their work. Both surveys were practically identical, though the first survey contained several questions projecting about students' ideas as they moved forward. The second survey included a few slight modifications once the work was completed as well as some additional open-ended questions only applicable at the end of the project.[23] The surveys were adapted from the ROLE (Research

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[22] The same reasoning was upheld by the IRB for the students' research projects, therefore the students were also not required IRB (Institutional Research Board) approval. The author is able to provide proof of this determination by request.

[23] The author will distribute these survey templates by request.

on Learning and Education) survey, an assessment tool intended for students in any field of research and developed based on a 3-year study of the essential features of undergraduate research (Lopatto, 2003).

Both adapted ROLE surveys consisted of multiple-choice questions, open-ended questions and rating scales that intended to measure how much students felt they had gained from their experience in intellectual, attitudinal, and social manners. Of the 15 students that partook in this project, 12 completed both the first and second surveys distributed. The responses of students who had not completed both surveys were eliminated. To maintain the anonymity of students, each pair of student surveys was randomly assigned a number and their names were eliminated from the data. The language used throughout this paper also maintains gender neutrality of all participating students.

In both surveys, students were asked to rate their perceived gain in terms of 26 question items. When thinking about how much of a gain they perceived, they were asked to choose between none / very small (1); small (2); moderate (3); large (4) and very large (5). Their answers were then used to populate an Excel sheet using a scale of 1-5 that compared their answers from survey 1 to survey 2. Corresponding bar graphs were then generated, organized by theme, and can be found throughout the results and discussion portion of this article.

For all item pairs that did not have one of the two answers, a pair-wise method of elimination was implemented. Similarly, all answers of N/A were treated as missing information and eliminated as a pair. This was because (1) we could not be certain why students chose the answer N/A and (2) the option of "non-applicable" did not fit into the 1-5 scale used to qualify categories and would have contaminated results if given a numerical value. Thus, the quantitative data for each question item includes only the students who responded to both surveys.

As researchers Verd and López (2008) affirm, the combination of qualitative and quantitative methods of analysis contributes to efficient analysis when the result is more than the sum of its parts. Given the variety of question and answer-types solicited in the student ROLE surveys, a

mixed methods approach was therefore used. The quantitative data paired naturally with themes from the qualitative analysis, and both types of data are treated as complimentary and converging.

2.4 Results and discussion

2.4.1. Gains chart categories

To facilitate the analysis of the remaining 25 gains items in the aforementioned 'gains' chart, items were grouped loosely into five major categories: (1) social and interpersonal skills, (2) general academic skills, (3) research skills, (4) personal development, and (5) professional development.

Though positive change was noted in every single gains item, there were five specific items that stood out as having changed by at least a full point on a scale of 1-5. These five items were reported by students in the first survey as having perceived a 'moderate' gain in survey one, while shifting to a 'large' gain by survey 2. They fell within the larger categories of general academic skills, professional development and especially on personal development. See graph 1.

Graph 1: Top five gain items

Item	Survey 1	Survey 2
Ability to see connections to college work	3.4	4.6
Learning to Persevere at a task	3.09	4.27
Enhancement of professional or academic credentials	3.1	4.2
Sense of Accomplishment	3.33	4.33
Tolerance for obstacles faced in the research process	3.17	4.17
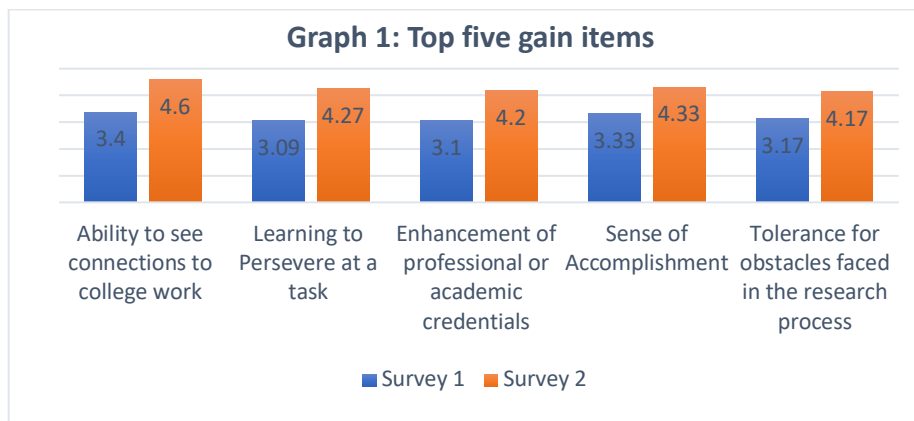
While all 25 items started out as gains that were 'moderate,' 12 out of 25 (48%) of all items ended with a 'large' gains perception by the end of the study. While this information is an interesting starting point, it is essential to further explore what students said in multiple-choice and open-ended survey questions in correlation with these numerical gains results for a clearer

picture of what students perceived in the process. Qualitative data will, therefore, be explored alongside the quantitative results in this discussion section.

2.4.2 Perceptions about mentoring

One of the main objectives of this initiative was to foster a better mentorship program for students in the interpreting program, particularly Latino/a students who have historically struggled with their course work and dropped out for reasons that seemed to include lack of college readiness, financial difficulty, child-rearing, etc. (Pinzl, 2018). Moreover, frequent mentor-mentee contact has long been indicated as an essential and constructive characteristic of a mentoring relationship (Dubois and Neville, 1997). For these reasons, and because mentorship has proven to bolster both student retention and success (Newton and Wells-Glover, 1999; Jacobi, 1991), it was deemed important to ask students at the beginning and at the end of the project (1) how much direct contact they perceived having with their research mentor and (2) how available they perceived their mentor to be at each stage.

At the beginning of the project students estimated on average that they spent about 2.18 hours of direct contact with their research mentor per week. By the end of the project this average had jumped to 3.38 hours per week. Similarly, students were asked in each survey to classify mentor availability. Initially students found their research mentor to be available more than half the time, with a slight increase in their perception of mentor availability upon the conclusion of the project. Finally, students were asked to rate their perception in terms of developing a continuing relationship with a faculty member, who in this case was also their research mentor. At the beginning of their project, students perceived that they had gained moderately regarding a continuing relationship with a faculty member, but largely by the end.[24]

In the first survey, students were also asked in what ways they felt they had autonomy in their project design. Though options included: being assigned a project by their research mentor, working exclusively with a mentor to design the project, choosing among various projects suggested by their mentor and designing the entire project on their own, the majority (7 of 12)

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[24] See *Graph 3: Social and Interpersonal Skills Table* for a visual representation of these results.

indicated that they had worked with their mentor *and* team to design the project. We examine more extensively below how students perceived group work, underlying how peer-mentoring may have also influenced their experience.

2.4.3 Perceptions about group work

Both the qualitative and quantitative data on the topic of group work reveals that students found working with their peers to be positive in some way, even if they also felt some tension or apprehension in the process. Eleven of twelve use positive words to describe group work such as 'good,' 'great' or 'helpful.' While five students identified group work as alleviating the work load, one third recognized other positive benefits of group work, for example, learning together and about group members, cooperation skills, and sharing ideas. Most of the nervousness, frustration and uncertainty that was identified in the first survey and had predominantly dissipated or transformed by the conclusion of the project. In survey 1, a student writes about his / her feeling about group work saying, "(I feel) a little nervous, since I don't talk to the people I'm with." The same student later responds to the same question in survey two reporting, "I really enjoyed working with my colleagues. I understood how they worked and more about them." Even though many identify group work as one of the most difficult parts of the project, all students participating in team projects found collaboration to be helpful or positive in some way by the end.

Students were also asked to rate how much group work enhanced or detracted from their experience. The average of student responses to these questions is measured according to this rating system illustrated in graph 2 below, showing a slight increase in satisfaction regarding group work overall (from 3.7 to 4.1).

Graph 2: Working with Other Students
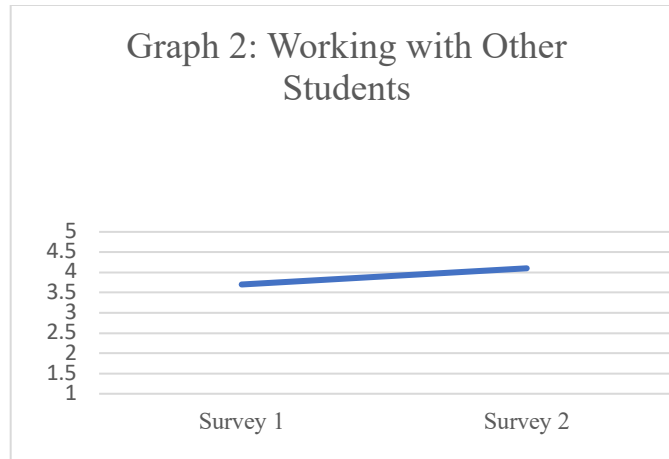
Graph Key

Students were asked to rate group work by choosing among the following choices:

1) Working with other students was the worst part of the research project

2) Working with other students moderately detracted from my experience

3) Working with other students did not affect my satisfaction one way or the other

4) Working with other students moderately enhanced my experience

5) Working with other students was the best part of the project

To sum up group work in the words of one participant:

> "As the profession of community interpreting is so fundamentally community-based, it is only appropriate that it (his undergraduate research assignment] be a group project. We had some minor logistical glitches at the beginning of our project with one member's location being far away from the rest of us and with a lack of initiative, but this issue was quickly addressed by the professor. In the end, groups were reformulated accordingly, which I think was beneficial to the quality of the research in all groups."

Indeed, this quote reveals that while the value of the group work was esteemed logical and motivational, difficulties were also recognized along the way. It is noteworthy that the student mentions the importance of the quick resolution of obstacles with the help of the research

mentor, again indicating the need for a consistent student-faculty-mentor relationship. Finally, the student reports that working with classmates was overall satisfactory and contributed positively to the result of *all* the projects carried out in this cohort.

Two question items on the gains charts seem to compliment the information gathered about group work and fit within the larger category of social and interpersonal skills: 'ability to collaborate with other researchers' and 'becoming a part of a learning community.' Looking at graph 3 we see that becoming part of a learning community comes .08 points shy of moving a full point up, putting this item as sixth of 25 gains items. The second item, 'developing a continuing relationship with a faculty member,' illustrates the point made above about the gains students felt about student-faculty mentorship relationships in the research process. The third, points to a developing a sense of collaboration with peers and colleagues.

Graph 3: Social and Interpersonal Gains

	Survey 1	Survey 2
Becoming a part of a learning community	3.58	4.5
Developing a continuing relationship with a faculty member	3.27	4.09
Ability to collaborate with other researchers	3.18	3.73
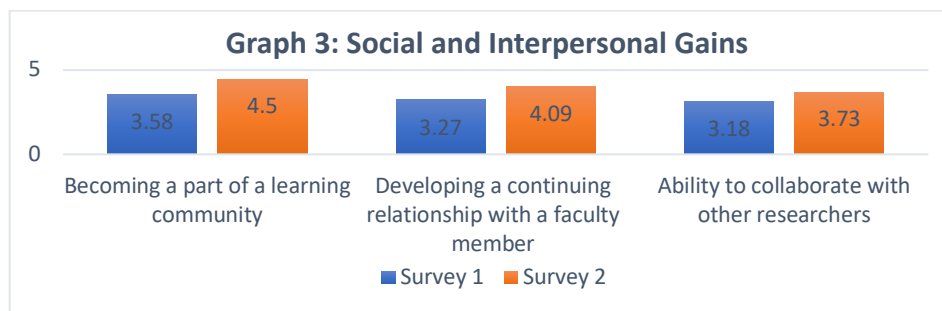
2.4.4 Motivation

Though all students reported some level of initial motivation at the very beginning of the project, many first expressed lukewarm sentiments that included qualifiers such as 'pretty,' 'kind of' or 'fairly' motivated, while others expressed significant motivation from the start. By the end of the project, some students indicated that stress or feeling overwhelmed throughout the project led to temporary dips in enthusiasm. Ten out of twelve report an overall increase or deepening of enthusiasm by the end of the project. As one student writes,

At the beginning, I was extremely excited for this project. Once we were paired up … I started looking at what we needed to do and what path we selected, I started to feel overwhelmed. It had

been a while since I'd done anything like this, and I found myself becoming anxious with the thought of everything we needed to do. After taking a step back, I was able to break the project down into sections which was much more tolerable and not so overwhelming. Our project had many hiccups, which definitely caused me to become overwhelmed, but through great teamwork, it all came together. I felt great about our final project and I'm proud of the accomplishments we achieved during the project.

The above student describes personal development, explaining that through challenges they not only develop problem-solving skills but also the capacity to persevere. The student's intention to create a manageable project is related to the quantitative gains question item 'learning to monitor your own behavior by making realistic work schedules and correcting your mistakes.' Also noted is the help of the team to pull through the challenges, even though group work was not part of the survey question item they were answers. Once again, while the student is optimistic on the outset of their answer, they recognize obstacles, and land on a positive note. Such resilience is related to yet another question item, 'tolerance for obstacles faced in the research process.' Finally, the student's pride in their work leads us to question item 'sense of accomplishment.' In conclusion, we observe a significant uptick in personal development gains as displayed in graph 4.

Graph 4: Personal Development Gains

	Survey 1	Survey 2
Learning to Perservere at a task	3.09	4.27
Tolerance for obstacles faced in the research process	3.17	4.17
Sense of accomplishment	3.33	4.33
Developing a connection between research and your personal...	3.5	4.25
Self-confidence	3.17	3.75
Learning to monitor your own behavior by making realistic work schedules...	3.42	3.92
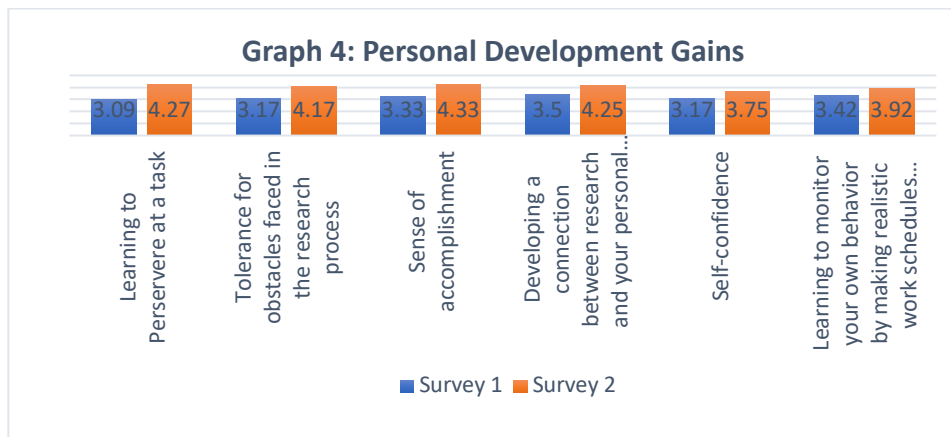
Related to these apparent gains in personal development, students also pointed to how their increasing notions of civic engagement and community awareness led to intrinsic motivation to participate and build on their research (5 of 12). Many were able to see how their results had

potential to educate the community on language access in the future. These sentiments are captured by another student in survey two:

> "Having completed the project, my enthusiasm for the subject matter has been fueled considerably. Although at times I felt the project was either rushed or lacked depth, due largely to logistical time constraints, I had the genuine feeling that I, along with my classmates, was scratching the surface of a very underappreciated and overlooked field within the La Crosse community. In other words, … I felt that our projects helped to shed light on how little we, including the general public, know about how, when, where, and why interpreting services are (not) used in the area. I hope that this exposition of how little we know and how sparse the academic literature is on the subject will prompt future students and academics to investigate further the issues that we helped to uncover."

The question item 'sentiment of becoming a part of a learning community' though mentioned previously in relation to group work, reveals itself here again but in the context of a larger learning community that includes spaces that move beyond the classroom. Furthermore, question item 'sense of contributing to a body of knowledge' is here noted with an average moderate gain (3.45) in survey 1, moving to an average large gain in survey 2 (4.09).

2.4.5 Perceived obstacles

Before carrying out their research, students were asked what they viewed as potential obstacles and difficulties. They were asked a similar question again after completion of the research project, but the question was reframed, asking what obstacles or difficulties they would see if they were to *continue* working on the research.
Both before and after the projects were carried out, the main obstacle that students foresaw was the cooperation of research participants, particularly the difficulty of obtaining survey responses. However, many more students commented on cooperation and participation of surveyed participants in the second survey. This is particularly notable in the students that had never carried out a research project before. As one student writes in response to obstacles foreseen in

continued research on this project, "Getting results is something I already had difficulties with and I think that getting results for a more in-depth project would be much harder." Though those without prior experience had not as easily foreseen this obstacle before carrying out their projects, the challenge of survey collection became very clear to them by the end of their research process and seemed to be more troubling to them than potential time constraints or group work logistics.

At the beginning of the project, approximately one third of students were worried about the time for finishing the project as well as group work challenges such as coordinating schedules, working together and sharing the workload. By the end, only two mentioned foreseeing these issues if they were to continue working on this research. Nevertheless, this is likely to be related to the fact that the question was hypothetical.

2.4.6 Reported challenges

Moving from the hypothetical to the actual experience of students, some initially reported uncertainty about carrying out their projects, especially those who had never done an undergraduate research project before. Some also indicated feeling a lack of guidance, a sensation of not knowing where to start, or not knowing how or where to get information. One student states difficulty in "clearly defining what it is I want to find. I have so many questions I want answered, and it's hard to narrow it down to only one." This sort of sentiment is noted much more by students in the first survey than in the second. There was also some indication that students felt challenged in carrying out tasks related to the research itself, writing the proposal or the appropriate presentation of data. Throughout the project, students also found group coordination and communication to be a challenge as well as finding the time to get the project done by the deadline. Survey participation of community members was also a major obstacle for many.

It seems appropriate here to address the gains category of research skills. Graph 5 illustrates that students did perceive gains in all categories with two categories reaching 'large gains.' However, the gains ranged from .75 to .3 points from survey 1 to survey 2, an arguably smaller change in

perception than in other gains categories, perhaps reiterating the difficulty that students encountered with the research process itself.

Graph 5: Research Skills Gains
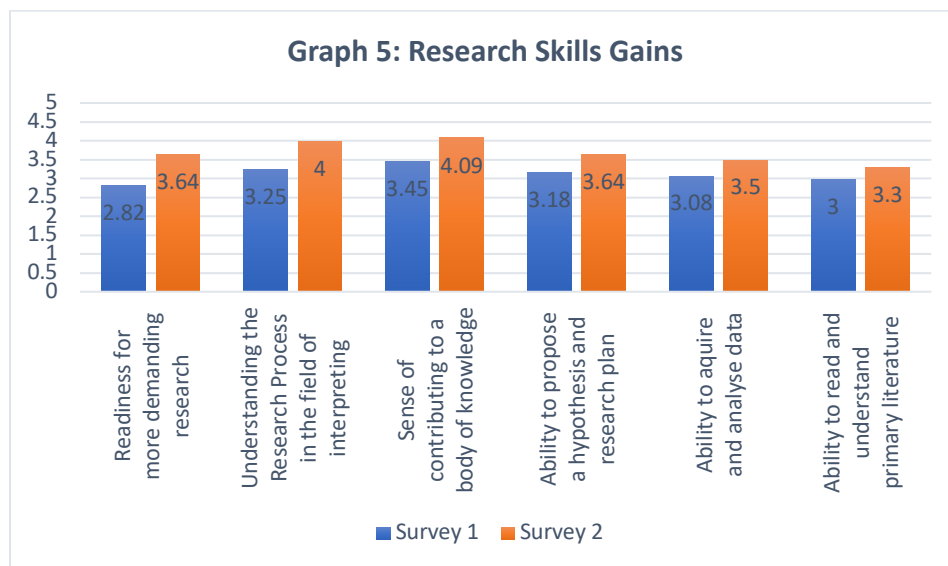
2.4.7 Enthusiasm

Overwhelmingly, students found the process of learning, particularly learning skills, methods or new awareness about their community to be exciting. As one student expresses in survey 1, "I am excited to learn what our research will reveal, and I am especially excited to work on developing potential solutions or any problems / issues we end up identifying." Indeed, students indicate excitement about many specific parts of the research project, especially analyzing results and presenting them. Several also indicate the potential that their work has for continued engagement with their communities and the profession of interpreting. They became aware of contributing to a larger body of research within the field. The same student quoted above in survey 1 above expands in survey 2 by responding, "The potential for making a difference in the community is the most exciting aspect by far."

Since the most recurring theme related to student enthusiasm was about learning, it is logical to compare the general academic skills gains to these qualitative results. By far, the question item 'ability to see connections to college coursework' is the greatest gain that students perceive within the general academic skills category, beginning just above a 'moderate' gain and pushing

toward a 'very large' gain by the end. The rest of the items in this category, however, proved only slight gain perceptions as observed in graph 6.

Graph 6: General Academic Skills Gains
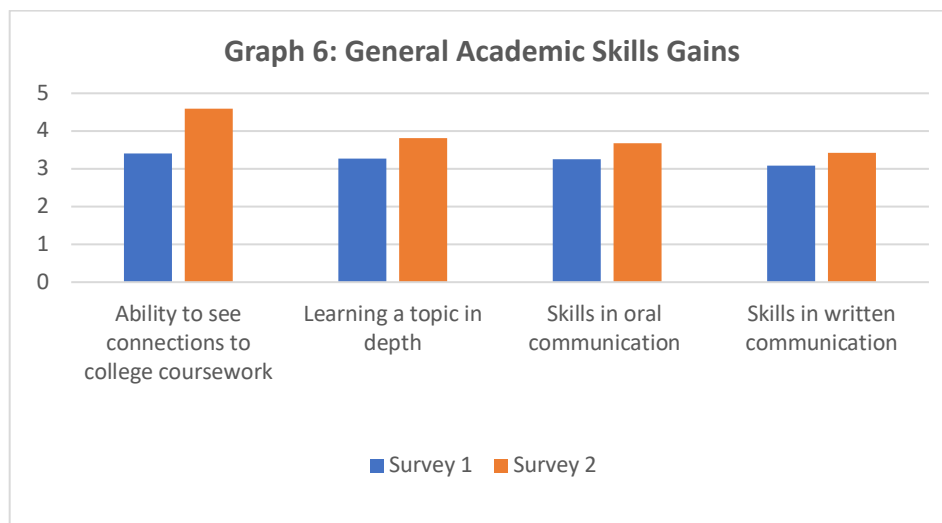
2.4.8 Benefits and drawbacks

From the beginning, all students found their action research to be somehow positive. No one reported this project to be a completely negative experience upon completion, though one student did state that the project took away from practical skill-building:

The project benefited me in my understanding of the state of affairs of community interpreting in the La Crosse area. However, I believe it had a negative impact on the development of my practical interpreting skills. Mostly due to a tight timeline, I felt that so much attention was given to the project that it detracted from the time and effort that I was able to dedicate towards regular practice and development of skills like simultaneous exercises, consecutive notetaking, sight translations, etc.

That said, students overwhelmingly mentioned how this project was aiding them in building skills, knowledge, and experience. They also observed significant connections between their work and the field as well as the impact that this work can have on their communities.

2.4.9 Lessons learned

Students seemed to conclude two major observances about the discipline of community interpreting from their action research. First, their projects underscored the great need for interpreters in their communities and the importance of language access for Limited English Proficient (LEP) individuals. One student writes, "how integral … (this) research … is to LEP populations—how important it is, how necessary." Although students may have already had this inkling based on primary literature, class discussions and personal experience, their undergraduate action researched helped them to point more precisely to where language access was needed in a more credible way. In addition, students learned about what the job entailed as displayed here:

(…) this project did, indeed, significantly inform me about how community interpreters are (not) perceived, contacted, contracted, and understood by the community at large ... [and] about some of the major obstacles community interpreters face during their work in the community of La Crosse and the surrounding area, such as a general lack of understanding and consensus among service providers with regard to the provision of language access services to the LEP community.

Apart from the difficulties and obstacles that interpreters encounter in the field, students also mentioned the discipline and presence required on the job, the study of terminology, the emotional management, the breadth of the field and the continuing education that interpreters are obliged to carry out as practitioners.

2.4.10 Career plans

While career plans after this project varied significantly among students, most described positive, forward-looking ideas for future. Although one student reported their project had not influenced their plans and two were uncertain, six indicated that the project confirmed or strengthened their desire to become interpreters. Several reported a desire to work in the sector that they researched saying, "after I get certified I would like to have the opportunity to work with real estate

agencies." These motivations are also echoed in the question items 'interest in a discipline' and 'clarification of a career path.'

Such responses give way to the category of professional skills development, where again we see increased gains overtime. While all items begin closer to 'moderate' gain perceptions, four end in 'large' gains perceptions as observed in graph 7.

Graph 7: Professional Skills Development Gains
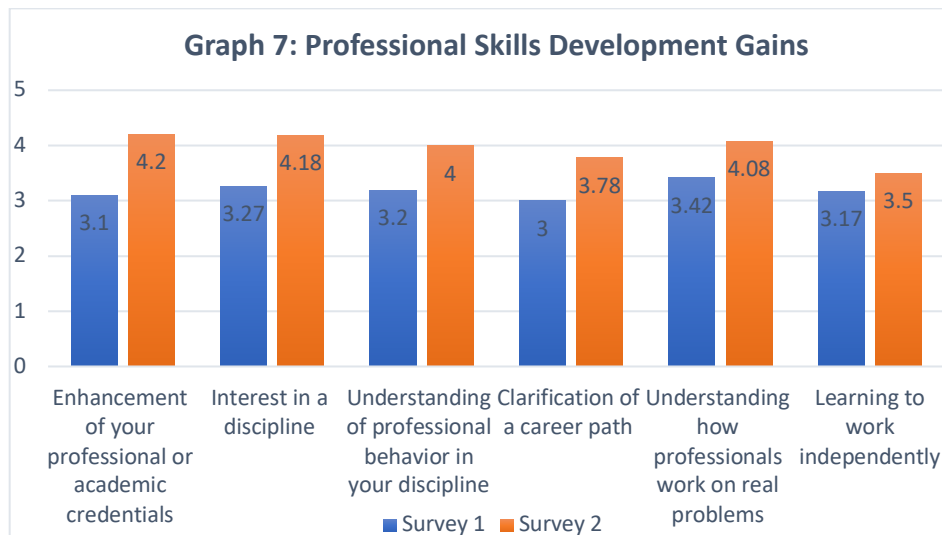
Apart from the professional skills that students reported on, one fourth of surveyed students stated that the research project fueled their desire to help or be proactive in the community. One remarks, "it makes me want to stand up and say something," indicating a sense of empowerment. Another states, "It (this research project) has come alongside my passions for service and social justice around access to services. Further evidence that I/we can make a difference in the community." A third reports, 'this project influenced my future plans mostly in my possible interest in continued research," as discussed in the following subsection.

2.4.11 Future research

Students' motivation to continue building upon their projects was overwhelmingly positive; all revealing diverse desires to continue to somehow expand on their project. Many hope to inform

the public and give back to the community in the form of trainings as reflected in the following quote,

I feel very motivated to use what I learned. At least I am going to volunteer … and provide the results back to other(s) … in the hopes that they get something out of it too. I would definitely be open to conducting a more in-depth project and eventually publish the results…

Some students explain specifically how they would like to return to the specific sectors that they researched to volunteer, conduct further research, implement change and monitor results; two hoped to eventually publish their work. As one writes,

I want to treat what I did as a research project as a trial run and better the study / questionnaire and redistribute it. I now know I would rather … ask for their [the survey-taker's] permission, then send it (the survey). I will be able to get more responses instead of just sending it.

These comments affirm the students' desire to continue learning and point toward a recurring theme of a heightened community awareness and desire for civic engagement. As another illustrates, "I feel like the public should be more aware. They should know they have a right. I want patients to know their rights."

2.4.12 Recommendations to future students

Students talk about a plethora of benefits when contemplating a conversation with future undergraduate researchers in the interpreting program. One fourth of students underline personal developmental that is both attitudinal and emotional (as outlined in the ROLE survey). In the words of one, "It is helping students to be confident, think positive, control emotions, and learn to deal with real life problems in the interpretation field." Others report how such skills are related to improved social, academic, research and professional skills:

Completing projects such as this one helps to instill confidence in the student's abilities to research a topic and develop a plan. Coming up with a plan and sharing it through a presentation

truly helps student's confidence in speaking in front of others which is something we will have to do in our professional careers. Being comfortable talking in front of others and to complete strangers is something which will truly enhance our abilities to execute our responsibilities as an interpreter, this is why it is so important for us, as students, to work on and improve these skills.

2.4.13 Advice for improvement

When asked for advice on improving the project, the primary recommendation from most students was to give them more time. While the time constraints for this project were due to specific logistics related to enrollment and pre-set dates, this student suggestion will be considered for the future.

2.4.14 Retention rates

Since part of the objective of carrying out this study was to improve retentions rates, particularly for Latino/a students in the interpreting program, we briefly present those numbers here. For context, Latino/a student retention of the 4 previous years (2014-18) was calculated at 42% and for non-Latino/a students at 87%.

Of the 12 students studied here in 2019, 8 (67%) successfully graduated from the program. The retention rate for Latino/a participants was 57% compared to an 80% retention rate for non-Latino/a students. While these findings may initially indicate increase in retention for Latino/a students than previous years (by 15%), we must not forget that 4 other participants in this undergraduate research initiative were not accounted for in this calculation, since their survey information could not be included. In summary, and as described here below, an accurate depiction of student retention or attrition in this study is hard to determine by ethnicity or otherwise, due to the small sample size.

2.5 Limitations

The principal limitation of this study is the previously mentioned sample size of student participants. With only twelve student participants, any data related to student retention or attrition is clearly non-generalizable. In addition, this project examines an initiative within one

interpreting program. A longitudinal study, with larger sample sizes, other language pairs and more interpreting studies programs would be required for more conclusive metrics. The secondary limitation of this study is the reliance on self-reporting measures and retrospective data, situating results within students' perception rather than using more objective methodologies. Finally, as in most action research carried out by a professor in the context of the classroom (Gibbs et al., 2017), the instructor's description of this initiative and analysis of the data is centered on their own reflective process, rather than a more critical outside view or methodology. Peer-review methods to mitigate such subjectivity should be considered in future studies.

Within the parameters of these limitations, we must also acknowledge that this project was propelled by both quantitative and qualitative research, bringing significance to the work carried out. Certainly, there is more room for investigation around how the implementation of undergraduate action research in interpreting programs may be of great benefit not only to aspiring interpreters, but to the communities in which they provide language access. Future research within this program may therefore seek to understand more about what students find relevant about their research for application in their future community interpreting roles, in this way moving away from a strictly sociological approach and toward data that might be increasingly useful to the scholarship of teaching and learning in community interpreting.

2.6 Conclusions

The incorporation of undergraduate research into a Community Interpreting Program as a High-Impact Practice (HIP) and mentorship tool is presented here to aid students' developmental growth and academic achievement. Within these parameters, the project was successful in encouraging student empowerment and engagement in their local communities. Students perceived that they had gained in all twenty-five items on which they were surveyed, helping us to evaluate the quality of student learning. These gain items were grouped into five categories that included social and interpersonal skills, general academic skills, research skills, personal development, and professional development.

As per Kuh's definition (2008), this High-Impact Practice was time intensive for students and the instructor / research mentor. However, and more importantly, incorporating undergraduate action research into the interpreting curriculum propelled learning beyond the interpreting classroom, encouraged important connections between faculty and students, and presented the opportunity for students to receive regular and meaningful feedback for a transformational learning experience. These objectives are also characterized by HIP implementation (Kuh, 2008). Based on student feedback for improvement, this project will be carried out over the course of an academic year instead of a semester for future cohorts.

This article highlights how students benefited from the career support and the psycho-social support of their mentors throughout their projects as affirmed by Kram (1985). The mentorship as related to career building, provided students with the challenging assignment of carrying out action research, exposed them to the reality of the field of interpreting in their own communities, aided them in gaining visibility as aspiring interpreters, and coached them through the process. In terms of psycho-social support, students' undergraduate action research projects provided them with role-models both in terms of interpreting researchers and practitioners. These researchers and practitioners in turn accepted, confirmed and provided feedback on the students' work at the interpreting conference where students presented poster presentations. Whether formal or informal mentoring came from their instructor, interpreting practitioners or peers, the students were guided through the building and establishment of networks beyond their usual circles and gained a greater sense of community engagement while reporting personal satisfaction as a result. This project was also an opportunity to encourage students to view learning as a continuous process. Finally, the mentorship that took place through these undergraduate research projects was reciprocal, as the instructor and research mentor also learned much along the way.

3. Article II: Non-scripted role-playing with heritage speakers and second language learners in the medical interpreting classroom[25]

3.1 Introduction

The Community Interpreting Certificate at Viterbo University is a 13-credit program that trains bilingual individuals to provide language access in community contexts such as schools, hospitals, businesses, etc. Students make up a diverse panorama of bilingual community-members (i.e., English-dominant US citizens, Spanish-dominant immigrants of varying immigration statuses and bilingual youth who are heritage speakers of Spanish). The aim of this program is to tailor interpreting training to the needs of students, considering the pedagogical approaches most appropriate for their language profiles. Since teaching and training in community interpreting has relied on more empirically based instruction in the past 25 years (Colina and Angelelli 2015, 1), as have corpus-based studies in the field of translation and interpreting (Arumí and Vargas-Urpi 2018, 423-426), this case-study intends to continue advancing such research in the college medical interpreting classroom. It presents overall and comparative findings of how heritage speakers and second language learners interpret, placing emphasis on textual aspects of dialogue in unscripted role-plays.

The primary modality observed in these classroom role-plays is short consecutive dialogue interpreting, that is, the interpretation of an exchange of utterances between two speakers in conversation. The corpus of this study is based on the transcribed audio recordings of interpreted role-plays, focusing primarily on the textual aspects of interpreted dialogue as an initial phase of research. The analysis of the interactional aspects of this corpus, inspired by Wadensjö (1998), will be examined in the next phase of research, when the visual cues from the video of these simulations can foster a more complete understanding of what is happening in the text. Thus, the

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[25] Pinzl, M. M. (2024). Non-scripted role-playing with heritage speakers and second language learners in the medical interpreting classroom. *Translation and Translanguaging in Multilingual Contexts*, *10*(2), 206–235. https://doi.org/10.1075/ttmc.00134.pin

current case study is placed within the framework of interpreting as a translational activity (Pöchhacker 2016, 9).

The research carried out by the interpreting professor of this study was intended as a reflective teaching practice. Previous informal observations in a role-play simulation lab setting seemed to indicate that students struggled to render dialogue interpreting accurately in unscripted role-plays. Thus, a case study was designed to examine the consecutive interpreting performance of twelve Spanish <> English interpreting students, aged 17-51. Of these twelve, nine were female and three were male. In terms of language profiles, seven students were second language learners (five learned Spanish as a second language; two learned English as a second language) and five were heritage speakers of Spanish (having lived most of their lives in the US). The heritage speakers of Spanish were mostly high school students who had studied some Spanish as a heritage language at school. They had access to interpreting courses at Viterbo University through the Early College Credit Program (ECCP) in Wisconsin. The students who learned either Spanish or English as a second language were community members (immigrants, those who had studied or lived abroad, etc.), most outside the traditional realm of university studies, with varying levels of education and life experience. Participants' previous education and experience interpreting were considered and displayed in the results and discussion section of this paper (see Table 2).

Aiming to gain empirical perspective and seek solutions for more effective teaching in the interpreting classroom, the primary research questions of this study were: (1) what textual mistakes and solutions are most frequent for interpreting students when role-playing in a medical simulation lab?; and (2) are there any tendencies or patterns salient to particular language profiles in this student sample?

Though the sample of students studied here includes both heritage speakers and second language learners, literature on specific or overarching needs for these different language groups in the interpreting classroom is sparse. In the realm of heritage education, recent studies have examined how heritage speakers or L2 learners face different challenges (e.g., Potowski and Lynch 2014, 154-170; Carriera 2016, 161-169). In particular, Carriera (2016, 161) underlines the lack of

pedagogical materials designed for 'mixed' language classrooms (which include both heritage learners and L2 learners) as well as the fact that classroom materials are primarily geared to L2 learners. Recent research indicates that there is a need to better understand how the specific skill sets of heritage speakers or second language (L2) students could lead to more effective interpreter education (Mellinger and Gasca-Jiménez 2018, 963-964). To contribute to this gap, the following section describes the methodology designed to analyze the overall and comparative challenges of heritage and L2 speakers in the simulation lab of a medical interpreting classroom.

3.2 Methodology

3.2.1 Data collection

First, to acquire general knowledge and skill sets, students were exposed to basic interpreting principles in the first eight weeks of the program. They carried out short, beginner-level recordings in simultaneous, consecutive and sight translation modalities and worked with scripted role-plays in the classroom. They also explored the intricacies of various codes of ethics and standards of practice. As a part of a scaffolded curriculum, students were then invited to participate in unscripted role-play scenarios in the Clinical Simulation Learning Center that is part of the student nursing facilities at Viterbo University. This opportunity took place before students began their 40-hour interpreting practicum in their final semester of the program. Designed with an interprofessional education approach, these role-play scenarios were a collaboration between several departments across the institution in 2019, involving nursing, social work, pre-med and interpreting studies students. The World Health Organization Study Group on Interprofessional Education and Collaborative Practice defines 'interprofessional education' as a scenario in which "students from two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes" (World Health Organization 2010, 7). Therefore, 'interprofessional collaborative practice' is a pedagogical approach in which health workers from various fields collaborate with patients, families, caregivers, and communities with the objective of delivering excellent quality care (World Health Organization 2010). Here, students of the health professions were given the role of caring for community members with limited English proficiency, who acted as 'patients', while

interpreting students of all three language profiles facilitated language access for all parties involved.

The collaborating faculty members of this classroom exercise designed information sheets for all participating parties (nursing students, social work students, pre-med students, interpreting students and community members who played out standardized patient roles). A standardized patient (SP) is an individual who is taught to play a specific role in patient scenarios for the training of medical personnel and other professionals in healthcare contexts (see "What is a Standardized Patient" in Standardized Patient Program - Perelman School of Medicine, University of Pennsylvania, accessed December 2, 2023).

The information sheets designed by the faculty members included the standardized patient's name, their brief personal history, and their current symptoms as well as each actors' mission in the role-play. Sample questions and answers were also provided to help guide the experience.[26] Students were asked to voluntarily sign a research study consent form that laid out the rationale, objectives, risks and benefits of participation, data privacy and participant rights. To reduce the pressure that interpreting students felt upon acting out their role and being recorded, this classroom activity was not graded. At the end of the role-playing, all students and community members gathered to carry out a debriefing session in which participants shared their thoughts and feelings, what went well or poorly, etc., with the aim of achieving the learning-community objective of interprofessional education collaboratives. While the debriefing portion of the exercise was not recorded, so that students could feel free to express their thoughts, feelings, observations and constructive criticism, the role-plays themselves were filmed with the simulation lab equipment.

As a caveat, it is important to mention that nursing, social work and pre-med students were still learning the skills of interviewing, active listening, responding, diagnosing, and educating patients in these simulated role-plays. For these reasons, speech patterns that pre-health professionals formulated often contained many false starts and stutters, were convoluted, too

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[26] A sample of the information sheets distributed to students participating in the simulated medical role-plays is included in the appendix of this article (Figure 2).

vague, or too detailed, as they were still learning how to comprehensibly explain ideas and concepts to the patients. The learning curve of the health professions students made the task of interpreting even harder for interpreting students. Moreover, health professionals-in-training are not generally accustomed to working with interpreters, especially with those who are also developing their professional skills and may perform best when interpreting short, clear utterances.

It must also be mentioned that unscripted role-play exercises are spontaneous, meaning that no scenario is ever the same. While some simulations in this study lasted 5 minutes, others took closer to 20, varying the effect of cognitive overload, and thus, performance. Since there was also no constant in terms of participating actors, variations in dialect, speech patterns, pronunciation, etc., it is difficult to isolate reasons for interpreting mistakes. Native English speakers in this study came from Africa, Latin America, and the US, while community members playing the role of patients with limited English proficiency came from the Caribbean, Central America, Spain and the US, bringing different accents and dialects in both languages. Furthermore, the time that the community members, in the role of patients, had spent in the US varied greatly, changing the amount of information they may or may not have understood from health professionals in the scenarios.

While acknowledging the challenges of this study, these difficulties must also be seen as strategic pedagogical tools. The variability of unscripted role-plays provides extraordinary advantages and opportunities for students to gain experience that closely imitates real-life scenarios. Exposing students to a variety of dialects, speech patterns, lengthy and convoluted sentences, etc., is one way to prepare them for the unexpected world of interpreting dialogue in the community. In truth, community interpreters work with families and individuals of all ages and diverse backgrounds, managing the ambiguity of appointments that can last a few minutes or go on for hours. Thus, interprofessional collaborations that simulate real interpreting scenarios still appear to be a reasonable attempt to train aspiring interpreters for equally challenging encounters in their future careers. While the exponentially dynamic circumstances of each unscripted role-play made them complicated to study in general or conclusive terms, all twelve were transcribed, nonetheless, and the resulting corpus was analyzed.

3.2.2   Data analysis

The mixed-method approach implemented to analyze this corpus was modeled after several previous corpus-based studies. It entails an overall qualitative design that is supported with quantitative data analysis techniques. The Translation and Interpreting in Criminal Proceedings Project (TIPp), carried out by the research group MIRAS, created an original tool that examined interpreting performance in courtroom proceedings in Spain (Arumí and Vargas-Urpi 2018, 432). This detailed instrument was based on Wadensjö's differentiation between "talk-as-text" and "talk-as-activity", to examine two main categories: textual and interactional aspects of dialogue (Orozco-Jutorán, 2019, 152). In a later study of the same transcripts in the Chinese <> English language pair, this measuring tool was modified slightly (Chi 2021, 134-139). Thus, the textual portion of these previous instruments proved useful as a starting point to quantitatively measure problems and solutions that interpreting students demonstrated in role-playing exercises. By combining and modifying elements of both the rubrics used in the TIPp project and Chi's work, the instrument used in this study is tailored to the medical simulations studied here.

Totals of Textual Solutions	Textual Problems and Solutions			Codes
	Adequate			A
	Improvable			M
	Inadequate			I
Specific Types of Textual Solutions	Adequate Solution (A)	Established Equivalent		EH
		Making some Information Implicit		IM
		Making some Information Explicit		EX
	Improvable Solution (M)	Change of Register		CR
		Minor Shift in Meaning		NMS
		Repetition	False Start / Stutter	EXP (REFSS)
		Grammar (G)	In Spanish	GE
			In English	GI
		Language Interference (Calques or Literal Translations)		LICLT
	Inadequate Solution (I)	Not Translated		NT
		Omission; Serious Omission		O, OG
		Addition		A
		Major Shift in Meaning, Serious Major Shift in Meaning		FS, FSG
			In Spanish	EDE

		Deficient Expression (ED)	In English	EDI
		Inadequate Terminology (ITER)	Of Medical Terms	ITER (M)
			Of Non-Medical Terms	ITER (NM)

Table 1. Rubric of textual indicators used for corpus annotation and list of codes[27]

In Table 1, the categories highlighted in grey are those that were added or significantly altered, while categories from previous versions, not pertinent to this study, were directly eliminated. Those categories left un-highlighted appear as they did in the original instruments.

Orozco-Jutorán (2019, 157-158) details the operationalization of the original TIPp tool, first explaining the interval scale within it, which measures problems and solutions interpreters display according to three categories: adequate solutions (A), improvable solutions (M) and inadequate solutions (I). Within each of these levels, Orozco-Jutorán (2019, 158) then describes the nominal scale created, with sub-categories that classify more specific translation problems that occur during the interpreting process. Within each interval level, the subcategories are not generally ranked as better or worse, except for a few indicators, such as omission, where a "serious" interval exists within the subcategory. While the original tool has been translated to English for this article, many code abbreviations originate from the Spanish tools.

In the adequate solutions interval, the interpreter conveyed the message accurately and precisely. The sub-categories include:

- Established equivalent (EH): The interpreter expresses the original message with precision in the L2 (i.e., language, culture, content and style), aligning with what has been established in the field as a correct solution.
- Making some information implicit (IM): The interpreter renders the meaning in general terms, though the message is diluted, reducing precision slightly.

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[27] Adapted from both the TIPp project (Arumí and Vargas-Urpi 2018) and Chi's subsequent tool (2021).

- Making some information explicit (EX): The interpreter renders the meaning in general terms, but slightly expands upon the original message, also reducing precision.

  The improvable solutions interval level consists of less serious mistakes, however the interpreted message requires improvement for more precision. 'Minor shift in meaning' remains unchanged from the original rubrics, while the other three subcategories were modified or added to the annotation rubric. In this adapted tool, the subcategories of improvable solutions include:
- Minor shift in meaning (from the source text) (NMS): The difference in the interpreted message is too slight to be deemed 'unacceptable'.
- Repetition by means of false starts and stutters (EXP (REFSS)): This subcategory is modified from Chi's study (2021) and occurs when the interpreter begins words or sentences various times before bringing them to fruition, leading to a convoluted or hesitant rendering of the original message.
- Grammar (G): This subcategory was added because some mistakes were small enough that interpreter still achieved the communication objective. These grammar mistakes were then further divided into Spanish (GE) and English (GI), for a more nuanced analysis of where students were challenged.
- Language interference (calques or literal translations) (LICLT): This subcategory was added due to frequency in the data. Here, the interpreter's renditions were not technically incorrect, but unnatural calques or literal translations from the L1 were evident.

  The final interval level, inadequate solutions, classifies serious distortion of the original message into eight indicators:
- Not translated (NT): The interpreter fails to interpret an entire utterance or turn of an interlocuter.
- Omission (O): The interpreter leaves out terms or information of the original utterance.
- Serious omission (OG): The information lacking is serious enough to have a consequence in the outcome of the patient's care.
- Addition (A): The interpreter adds information to the original message.
- Major shift in meaning (FS): The interpreter distorts the meaning substantially from the original message.

- Serious major shift in meaning (FSG): The interpreter distorts the original message so much that it affects the outcome of the patient's care significantly.
- Deficient expression (ED): The interpreter's rendering is incomprehensible or contains more than one significant grammar mistake; EDI if the deficiency is in English and EDE for Spanish.
- Inadequate terminology (ITER (M) for medical and ITER (NM) for non-medical): When an equivalent term or expression exists, but the interpreter provides an incorrect term or utterance instead.

Once the corpus of role-play transcriptions was annotated, indicators for each student were quantified and placed into tables, to determine patterns of problems and solutions. For the sake of anonymity, student names were replaced by performance number rankings, and their personal pronouns throughout the text have been kept gender neutral.

3.3 Results and discussion

Tables 2-4 in this section are color-coded, first with the objective of illustrating how students performed according to their language background. Each student's language profile is thus indicated next to the anonymized number for each student and organized in color: Spanish as a second language (SSL) in purple, heritage speakers of Spanish (HL) in pink and English as a second language (ESL) in peach. Secondly, boxes highlighted in yellow indicate the students with the most positive scores within columns, while the boxes in grey highlight the students who struggled most. Students without yellow or grey highlight fall in the middle between the highest and lowest performing students. Finally, students in all tables have been ranked according to performance, from highest to lowest number of adequate interpreted solutions.

3.3.1   Adequate solutions

The data in Table 2 displays both qualitative and quantitative data on interpreting performance as related to education level and prior experience. Specific to this chart, students with a completed undergraduate degree or higher while in the program are indicated in darker green, those with some other higher education experience in light green and those with a high school diploma or still attending high school are not highlighted in color.

Student (Ss) and Language Profile	Level of Education	Prior Experience Interpreting	Total Adequate Solutions: (EH + IM + EX)
Ss1 (SSL[1])	Undergraduate degree	One year working full-time as medical interpreter	146
Ss2 (HL[2])	Senior in high school	Grew up interpreting for family	78
Ss3 (ESL[3])	Undergraduate degree	None	48
Ss4 (SSL)	Undergraduate degree	One year working regularly as medical interpreter	45
Ss5 (SSL)	Undergraduate degree	About 10 hours of *ad hoc* interpreting for a medical mission abroad.	40
Ss6 (HL)	Senior in high school	Grew up interpreting for family	37
Ss7 (SSL)	Master's degree	None	33
Ss8 (SSL)	Working to finish undergraduate degree	None	33
Ss9 (HL)	High school diploma; some university experience	Grew up interpreting for family	26
Ss10 (ESL)	High school diploma	None	25
Ss11 (HL)	Senior in high school	Grew up interpreting for family	25
Ss12 (HL)	Senior in high school	Grew up interpreting for family	14

[1] SSL = Spanish as a Second Language
[2] HL = Heritage Learner (in this study, of Spanish)
[3] ESL = English as a Second Language

Table 2. Interpreting performance as related to education level and prior experience

The four students who performed in the top third of this case-study included those from all three language profiles (English as a second language, heritage learners of Spanish and Spanish as a second language). Of these students, most had completed 4-year undergraduate degrees and half had some professional experience in the medical field as interpreters. One had grown up interpreting as a child communication broker for family. The students who fell in the middle in

terms of overall performance were mostly students who learned Spanish as a second language. These students had received about as much education as the top third of the class, though they had somewhat less experience working professionally as interpreters. Those with the lowest number of adequate solutions were mostly heritage speakers. While those students did grow up interpreting for their families, they generally had the lowest cumulative level of education, since most of them were high schoolers (17-18 years old). While this initial data on level of education and interpreting experience is interesting, a sole focus on these influences simplifies the rich and intersecting complexity of students' social identity factors, leaving room for continued research on how intersectionality may influence interpreting performance.

3.3.2   Improvable solutions

The four sub-categories of the improvable solutions interval included in this case-study are all considered indicators that could be improved upon but are not extremely detrimental to the original message or communication flow (see Table 3). The color coding and abbreviations for student language groups follow the same parameters as Table 2. Since this chart maintains the same ranking of students as in Table 1, the color scheme helps us to see that improvable solutions appear to be more prevalent for students who performed overall in the middle (students 4, 5, 6, and 8). Interestingly, both students who performed best (students 1 and 3) and most poorly (students 9, 10, 11, and 12) overall display less improvable mistakes. In the following sections, extracts from the corpus exemplify how these improvable solutions play out in each of the four sub-categories.

Student	Expansion: False Starts / Stutters EXP (REFS)	Minor Shift in Meaning (NMS)	Grammar (G)		Language Interference (Calques & Literal Translation) (LICLT)	Total Amount of Improvable Indicators (M)
			Spanish (GE)	English (GI)		
Ss1 (SSL)	1	3	5		11	20
Ss2 (HL)	3	2	3		4	12
Ss3 (ESL)	3	8		6	8	25
Ss4 (SSL)	6	17	11	1	8	43
Ss5 (SSL)	9	8	11		9	37
Ss6 (HL)	4	9	10		7	30
Ss7 (SSL)	4	2	5		4	15
Ss8 (SSL)	16	3	14		3	36
Ss9 (HL)	7	5	1	1	4	18
Ss10 (ESL)	0	2		1	2	5
Ss11 (HL)	0	6	7		6	18
Ss12 (HL)	1	2	1		8	12
Totals:	54 (20%)	67 (25%)	77 (28%)		74 (27%)	271 total improvable mistakes

Table 3. Improvable solutions quantitative data chart

3.3.2.1 Expansion: false starts and stutters (EXP (REFS))

The false starts / stutters category (20% of all improvable mistakes) was added to the measuring instrument *ad hoc* because it occurred frequently when reviewing role-play transcripts. Students who learned Spanish as a second language are those who struggled the most with this indicator (see Table 3). Such hesitancy and repetition of words and ideas reduces accuracy, can lead to a more confusing message, and may give a sense that the original interlocutor was hesitating or uncertain as seen in the following excerpt (student 8):

Social worker: And do you have supports at home?

Interpreter: ¿Y tiene ayuda en la casa? (Translation: *And do you have help at home?*)

Patient: Ehhh, pues mi hijo, mi esposa, ehhh, y la esposa de mi hijo y mis nietos y mis nietas. (Translation: *Um, well, my son, my wife, um, and my son's wife and my grandsons and granddaughters.*)

Interpreter: Uh, well, my son, his wife, <u>my my my</u> **(EXP (REFS))** wife, <u>my son</u>, his wife and our grandkids.

The false starts and stutters exemplified by student 8 are not serious mistakes, but rather something to work toward improving, since such hesitancy transmits a message of insecurity that the original utterance did not contain. In other places, false starts or stutters seem to indicate that the student understood they started incorrectly and needed to make a self-correction as seen in the example here from student 5:

Nurse: Are you in any pain right now?

INTP: <u>Estás en un…</u> **(EXP (REFS))** ¿Tiene algún tipo de dolor ahora? (Translation: *Are you in…Are you in any type of pain now?*)

The first formulation of the interpreted question exemplified by student 5 would have been grammatically or functionally incorrect in Spanish. While the final rendering might still be considered a calque or literal translation from English, it effectively relays the message and demonstrates that the student corrected what was originally an incorrect formulation of this question. Further research is necessary to better understand what factors might influence such false starts and stutters (i.e., lack of confidence, language skills, training/practice or stress about the medical scenario).

3.3.2.2 Minor shift in meaning (NMS)

Minor shifts in meaning (25% of overall improvable mistakes) occurred for all students at some point in their role-plays, though not displaying as particularly more problematic for one profile of students over another. These slight distortions in the message might include a change in

modifier as an attempt to describe a term that the interpreter could not render, as in the following example (student 4):

Nurse: Are you still having stomach pains?

Interpreter: ¿Es que, <u>ahora</u> le duele el estómago? **(NMS)** (Translation: *Does your stomach hurt now?*)

Here, the student replaces the modifier 'still' with the word 'now'. While this distortion is slight and does not impede the conversation from continuing, it also does not reflect the exact same meaning of the original utterance.

3.3.2.3 Grammar (G)

Grammar mistakes account for 28% of total improvable mistakes that students make (see Table 3). Though none of the grammar mistakes coded within the improvable solutions interval affected the overall comprehension of interpreted messages, all students in this study made some grammar mistake at least once within their role-play, with students who spoke Spanish as a second language struggling the most. Overall, 81% of grammatical mistakes were made in Spanish, with only 11.5% in English. This may indicate that even though there were three different language profiles in this study, as a Spanish <> English interpreting group, these students were generally English dominant in terms of grammar. It should also be considered, however, that English-speaking health professionals spoke more frequently and in much longer utterances than Spanish-speaking patients, requiring students to interpret more often into Spanish.

The two most salient grammatical mistakes for all students, had to do with (1) the correct use of prepositions (either because students chose the wrong preposition or did not use prepositions correctly in a sentence), and (2) grammatical agreement (gender, number or subject-verb). Agreement, constituting 25% of total grammatical mistakes when adding English and Spanish agreement issues together, was a problem mostly for those who learned Spanish as a second language. L2 Spanish speakers (students 1 and 4) made mistakes like, "*mucho agua*" o "*un reunion*", using a masculine determinant for a feminine noun. Student 5 displays number agreement trouble with "sus cuidado", adding an unnecessary <s> of the plural on the possessive

adjective 'su' when 'cuidado' is singular. The remaining specific grammatical mistakes in Spanish included use of pronouns and articles, confusion on consistent and correct usage of *Ud.* and *tú* forms, using the subjunctive, the correct use of *ser* and *estar*, and general awkwardness. However, these mistakes seem to come up occasionally for some students, rather than as a general trend.

English mistakes occurred mostly for students who speak English as a second language. The one category of English mistakes that also appeared for L2 Spanish-speakers in Spanish was that of agreement. On occasion, subject-verb issues such as "he have" and "how much time does this cycle… takes?" came up in English for two students (9 and 10). The remaining specific mistakes in English were sparse, though typical challenges for ESL learners, such as question formation, sentence syntax, and the correct use of 'no' vs. 'not'. For more details on grammar mistakes, see Table 5 in the Appendix.

3.3.2.4 Language interference (calques and literal translations) (LICLT)

All students displayed some language interference (27% of improvable mistakes), including calques and literal translations from one language to the other. Awkward utterances were coded as LICLT when they did not lead to incomprehension on the part of the interlocutors (neither service user nor provider) and seemed to be influenced by the language of the original message. Interestingly, most students who performed highest overall (students 1, 3, 4 and 5) seemed to also display the largest amount of language interference (Table 3). So, even though high performing students did not make as many serious mistakes, their interpreting was still significantly influenced by the contact of L1 and L2. Such interference was evident via grammar calques, pronunciation calques, and word choice. The following example illustrates language interference that is revealed through a grammar calque (student 11):

Nurse: Uh**,** one more question: How did you get here today? Do you guys have your own vehicle that you drove here? Or did you take a bus?

Interpreter: Una pregunta más: ¿Cómo llegaron ustedes hoy aquí? ¿Trajeron su carro o cogieron el bus, el autobús? (Translation: *One more question: How did you get here today? Did you bring a car or get the bus, the bus?*)

Family member: Yo vine manejando. (Translation: *I drove.*)

Interpreter: <u>I came driving</u>. **(LICLT)**

The underlined text is not grammatically wrong, but it is an awkward word-for-word translation from the Spanish construction. In English, the most natural construction of this message would be: 'I drove'. Another example of a calque or language interference through both pronunciation and word choice is illustrated in the following rendering (student 2):

Social worker: Um, so I hear that you are currently diagnosed with diabetes.

Interpreter: Así que <u>escucho</u> que ahorita usted está diagnosticado con <u>diabetis</u>. **(LICLT)** (Translation: *So, I hear that now you are diagnosed with diabetes*)

In the extract above (student 2), we note several places where language interference is apparent. First, the interpreter chooses the word '*escucho*' for 'I hear'. The more appropriate way to express this idea in Spanish might be '*entiendo*' or 'I understand'. Then, at the end of the sentence, a pronunciation calque occurs. This student uses the same pronunciation of 'diabetes' in English for their Spanish interpretation, rather than changing the final vowel to a long <e>. A more natural rendering might be: "Así que entiendo que actualmente le han dado un diagnóstico de diabetes". Nevertheless, these calques or literal translations were insignificant enough that the patient who received this message had no trouble understanding the message.

3.3.3   Inadequate solutions

When it came to the inadequate solutions interval of textual mistakes, we can see that students 4-9 are the ones who seem to struggle most (see Table 4). As to be expected, the top three performing students displayed the least number of serious mistakes. Surprisingly, the students who performed most poorly (students 10-12), tended to make less mistakes when it came to

omission, vocabulary, and deficient expression. These same students, however, in observing their role-plays qualitatively, also tended to interpret in shorter sentences, make more information implicit, and largely failed to translate important utterances.

Student (Ss) and Language Profile	NT	O	OG	A	FS	FSG	ITER (M)	ITER (NM)	EDE	EDI	Totals
Ss1 (SSL)	1	1	0	0	1	0	0	0	0	0	3
Ss2 (HL)	5	5	1	1	0	1	7	1	1	0	22
Ss3 (ESL)	6	12	1	2	4	1	5	1	2	0	34
Ss4 (SSL)	11	19	13	5	7	6	19	3	12	2	101
Ss5 (SSL)	21	14	0	3	4	0	11	1	7	0	61
Ss6 (HL)	16	17	5	5	4	7	10	0	5	0	69
Ss7 (SSL)	12	8	1	0	1	0	5	0	4	0	31
Ss8 (SSL)	12	16	2	1	2	0	15	2	10	1	61
Ss9 (HL)	16	9	10	7	5	5	4	2	1	0	59
Ss10 (ESL)	35	8	5	3	4	4	4	0	3	1	67
Ss11 (HL)	19	10	7	0	7	3	6	0	1	0	53
Ss12 (HL)	18	5	2	0	1	0	3	2	2	0	33
Totals:	172 (29%)	124 (21%)	47 (8%)	27 (5%)	40 (7%)	27 (5%)	89 (15%)	12 (2%)	48 (8%)	4 (1%)	594

Table 4. Inadequate solutions quantitative data chart

3.3.3.1 Not translated (NT)

All students in this study failed to interpret an entire utterance in their role-play at least once, non-translation being the indicator that was most frequent within the inadequate solutions interval. However, of the utterances coded as not translated, 77 out of 172 (about 46%) were single-word utterances that appear in turn-taking dialogue like 'hello', 'hola', 'sí', 'yes', 'ok', and 'no' (i.e., Sacks, Schegloff, and Jefferson 1974). These utterances carry significant pragmatic value in context (i.e., establishing contact, answering a greeting, acknowledgement) and though short, can be more thoroughly analyzed through the lenses of discourse and conversation analysis (Drew and Heritage 1992). Since words like 'ok' and 'no' carry essentially the same meaning in both English and Spanish within this context, the debate of whether to code

the absence of these utterances as 'inadequate solutions' is worth considering, but beyond the scope of this article.

In other cases, utterances, or even entire side-conversations that are not translated can be extremely detrimental to the transparency and outcome of an appointment. Take for instance, the underlined portion of the following extract which was not interpreted for the patient (student 12):

Patient: ¿Tengo cáncer? (Translation: *Do I have cancer?*)

Interpreter: Do I have cancer?

Healthcare professionals gasp and then laugh, apparently surprised that the patient is unaware of their diagnosis. Nurses consult the chart and mumble amongst one other:

Nurse to another colleague: (…) a notification that she has the diagnosis … I wish she had family here. **(NT)**

In this case, the interpreter seems to make the conscious decision not to interpret the conversation that takes place between healthcare professionals in response to the patient's serious question, "Do I have cancer?". While interpreting a side-conversation between providers at the bedside may require the interpreter to move into a simultaneous (or *chuchotage*) interpreting mode, no attempt was made by the student to keep the patient in the loop about what the nurse and their colleagues were talking about. Even summary interpreting might have been better than completely excluding the patient from the conversation. The failure to interpret everything within an appointment can leave the patient on the outside of their own care and lead to mistrust of the interpreter. Thus, while some non-translated short utterances understood by all parties may not be entirely necessary for a smooth flow of communication to take place, failing to interpret full sentences and entire side conversations can gravely affect the outcome of a healthcare scenario.

3.3.3.2 Omission (O) and serious omission (OG)

Almost all students engaged in a significant amount of omission and/or serious omission in their simulations regardless of their language background, with the sum of both categories making up 29% of all inadequate solutions. Only three students omitted such minimal information that this

textual indicator did not affect the interpreting encounter negatively (see Table 5). Not remembering a short phrase in the middle of others, or not retaining all items in a list was a common omission as underlined in the follow excerpt (student 6):

Nurse: And if it [your blood sugar] is too high, <u>you can have headaches</u>, blurry vision, um, trouble concentrating. **(O)**

Interpreter: Uh, si está [el azúcar en la sangre] muy alta, puede tener otra vez su visión borrosa y no se puede concentrar muy bien. (Translation: *Um, if it [your blood sugar] is very high, you can have blurry vision again and you can't concentrate very well.*)

While shift in meaning is also observed in the above extract (student 6), the focus of this example is omission. While one symptom of high blood sugar (headaches) is left out of the extract above, this omission will not likely affect the outcome of this medical appointment significantly.

More serious omission, however, displayed by five students in this study, might lead to significant harm to the parties in a real-life interpreting scenario. Below, serious omission is again combined with other problems, like major shift in meaning, and false starts and stutters (student 9). In this example, the nurse is trying to emphasize the importance of drinking fluids to prevent a urinary tract infection.

Nurse: Drinking cranberry juice <u>can be very effective in prevention, um, with UTIs, so, yes</u>, you can drink cranberry juice <u>and drinking water is very important as well</u>. **(OG)** …

Interpreter: Puedes tomar más, este, jugo de arándanos y este eso te puede ayudar a <u>bajar la, a disminuir</u> la infección <u>de, ahhh, de</u> la infección, bueno la infección. **(FSG; EXP (REFS))** (Translation: *You can drink more, um, cranberry juice and, um, that can help you to lower the, to decrease the infection of, um, of the infection, well, the infection.*)

Here, the interpreter omits that drinking cranberry juice can *prevent* future infections as well as the importance of drinking water. Such serious omission creates a communicative situation in which the patient does not receive all the important information necessary for their care. In this example, the patient receives information that was not provided by the nurse, due to a serious

major shift in meaning (the cranberry juice can *reduce* the infection). Moreover, the false starts and stutters throughout the entire utterance render a convoluted message. The combination here of serious omission, serious major shift in meaning, and false starts and stutters can be a great detriment to the parties in this healthcare scenario.

3.3.3.3 Addition (A)

Addition was of the least problematic indicators for students in this exercise (only 4% of inadequate solutions), and there appeared to be no clear tendency for one language profile to add more information than others. The additions that did occur tended to add courtesy or formulaic politeness that interlocutors did not originally express. Student 9, for instance, adds "take care" in the excerpt below:

Nurse: Have a great rest of your day.

Interpreter: Buen día, cuídate. (Translation: *Have a good day; take care.*) **(A)**

Sometimes the choice between addition and shift in meaning was challenging, though the following example from student 2 was coded as addition because the rest of the original message was rendered intact:

Nurse: This [measuring your blood glucose] is important to know how much of the insulin you should give yourself.

Interpreter: Esto [medir la glucosa sanguínea] es importante para saber el aumento en la cantidad de insulina que tiene que darse usted. **(A)** (Translation: *It [measuring your blood glucose] is important to know the increase in the quantity of insulin that you have to give yourself.*)

The nurse in this extract does not explicitly indicate *increasing* (or decreasing) the amount of insulin, since "how much" is dependent on the number that the patient reads on their glucose monitor. While the nurse will likely clarify these details as they continue to do diabetic education with the patient, the interpreter's addition to this utterance could still confuse the patient.

3.3.3.4 Major shift in meaning (FS) and serious major shift in meaning (FSG)

All students shift meaning at some point within their role-play exercise, often related to imprecise grammar or terminology. In the following example, a nurse questions the patient about what they were doing when they began feeling shortness of breath. In addition to omitting an important part of the original utterance, the interpreter (student 7) uses the present progressive instead of the past progressive in their renditions, causing a major shift in meaning:

Nurse: <u>Ok, um,</u> what were you doing today in the yard? <u>That your daughter saw you doing?</u> **(O)**

Interpreter: ¿Qué está pasando hoy en el jardín? **(FS)** (Translation: *What is happening today in the yard?*)

The difference between "what were you doing" and "what is happening" is significant, and certainly is not an equivalent message. A major shift in meaning could also result from an issue with vocabulary, as in the following example (student 4):

Nurse: I'm Laura, I'm also a student nurse.

Interpreter: Y me llamo Laura y también soy <u>una, es… enfermera, estudiante de la enfermeridad</u>. **(FS)** (Translation: *And my name is Laura and I am also a, is… nurse, "enfermeridad" student.*)

The interpreter is struggling with the term 'student nurse', vocabulary that is specific to this US context, in which a nurse-in-training often shadows or assists a registered nurse in clinical settings. The student stumbles, eventually inventing a term 'enfermeridad', with the root of 'nurse' and a common Spanish suffix '-idad'. With all the stops and stutters, the meaning of the original utterance is ultimately lost in this convoluted and inaccurate rendering. An example of an even more serious major shift in meaning was also highlighted in the serious omission section of this article.

3.3.3.5 Deficient expression (ED)

Deficient expression was accounted for when students' interpreted solutions were incomprehensible, or when their interpreted message contained more than one significant grammar mistake. Ninety-two percent of the time this sort of language breakdown occurred in Spanish (EDE) and was most frequent for students who had learned Spanish as a second language. Student 8, for instance, struggles to render a coherent message into Spanish:

Doctor: Ok, Mister Ramirez, it looks like we diagnosed you with a urinary tract infection, so that's just when, uh, bacteria gets into your urethra, ok?

Interpreter: Uh, ok, <u>es-- parece que el diagnos-- o nos ha hecha…hicieron echamos una diagnosis de alguna ITU</u> que es cuando la bacteria va a su uretra. **(EDE)** (Translation: *Um, ok, it, it seems like the diagnos—or he has given us ---they gave, we threw a* diagnosis *of some UTI that is when the bacteria goes to your urethra.*)

In this example, the student lacks the vocabulary necessary to render the message, specifically the terms 'diagnosed' and 'urinary tract infection'. Instead of asking for a moment to look up a term, the interpreter muddles through, the doctor is unaware of the communication break-down and the patient remains, in this case, silent.

3.3.3.6 Imprecise medical (ITER (M)) and non-medical (ITER (NM)) terminology

To better quantify how well students did with terminology, every medical term within the context of each role-play was placed in an assessment table that included the original term, the term rendered by the interpreter and whether the term was rendered correctly, incorrectly, omitted, etc.[28]

Within the corpus, terms related to medical contexts came up 735 times in total, constituting a glossary of 266 different medical terms. Two-hundred and sixteen of the 266 entries (81%) appeared in English, with the remaining 50 in Spanish (19%). The significant dominance of English terms in these role-plays must again be considered as we examine why students seem to commit more mistakes when interpreting into Spanish. The predominant English → Spanish interpreting direction underscores the role of health professionals to actively explain and ask questions, and the patients' more passive position of listening and short responses. The quantitative data compiled from the vocabulary assessment table was put into a bar graph to visualize the students' challenges and achievements (see Figure 1).

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[28] For an abbreviated example of the vocabulary assessment tool, see Table 6 in the appendices.
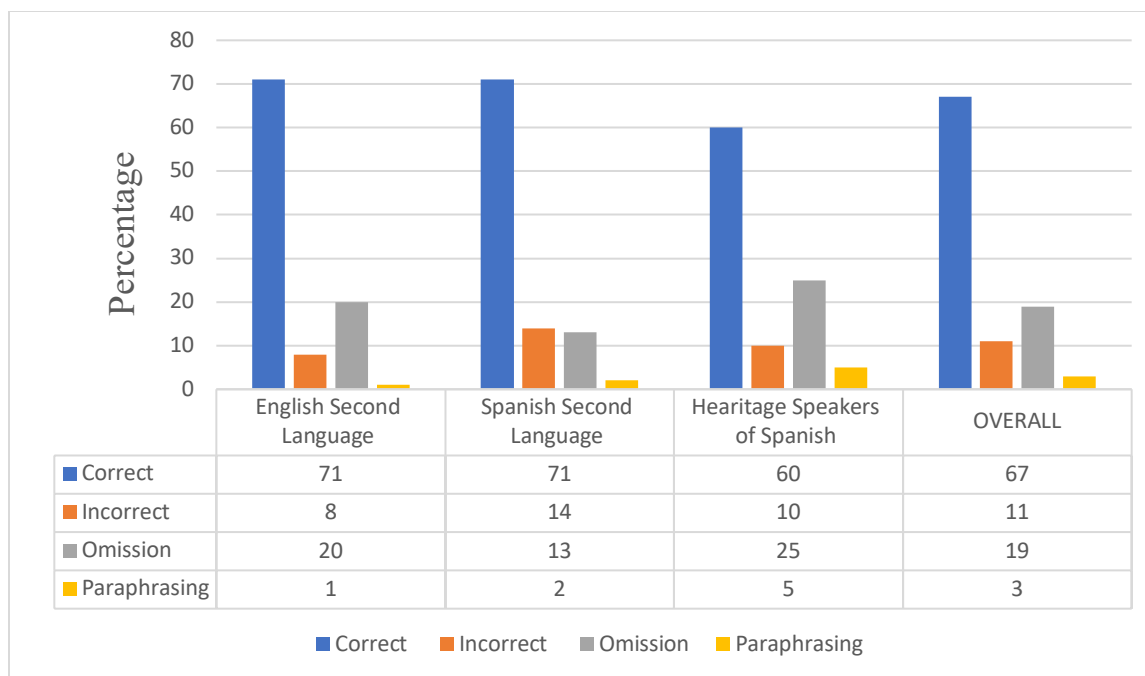
Figure 1. Medical terminology quantitative graph

Students rendered medical terminology 67% correctly on average, with L2 English and Spanish speakers averaging 71%. Heritage speakers averaged slightly lower, at 60%. However, lower vocabulary skills may be explained since most of these students were high schoolers, still of a formative age. In terms of US-specific terminology, there were only a handful of terms that appeared, which included: pre-medical student, provider, student-nurse, *aseguranza* (insurance), *chequeo/rechequeo* (checkup/follow-up). The first three English terms are US-specific because they have to do with details in the medical institution and hierarchy related to health-profession titles and positions. These terms proved challenging for some students, though others were able to render acceptable solutions. The latter two words in Spanish may come from the proximity of Latin American Spanish and US English in the North American context, making for new variations of vocabulary. In the case of these terms, which are very common within the US, students had no trouble rendering them back into English accurately.

Students who learned Spanish as a second language omitted less terminology overall, while ESL and heritage learners struggled most with omitting vocabulary, especially medical terms. On the contrary, those who learned Spanish as a second language produced more incorrect terminology than the other two language profiles. Most often, they seemed to hear a term in their L1 (English)

but did not know the equivalent in the L2 (Spanish). Occasionally, these students were unfamiliar with a term in Spanish and therefore could not interpret it back into the L1 (English). Overall, it was rare that students asked for clarification of terms or for a pause to look up a term. Sometimes, the incorrect pronunciation of terms in the L2 led those who learned Spanish as a second language, to produce an incorrect (or non-existant) term. Student 4, for instance, says "s*i*udando" instead of 's*u*dando' (sweating). That said, when minor pronunciation issues arose, the principal interlocutors usually understood the interpreter anyway and the phonetic mistake did not create a serious problem in the interpreting scenario.

Finally, paraphrasing as a strategy, was used infrequently by all language profiles when they were unsure of terminology, though heritage speakers found this solution more accessible than L2 speakers. Sometimes students attempted to describe the meaning of terms unsuccessfully, in which cases, their solution was determined incorrect. Student 4, for instance, struggled with the term 'motion sickness' and tried to describe it by saying "enfermedad de… como movimiento" ("sickness of… like movement"). An example of successful paraphrasing, however, is illustrated by student 7, when they interpret "*doctor de cáncer*" (cancer doctor) for the original term 'oncologist'.

Overall, students' problems with terminology was related almost entirely to medical terms, with only 12 non-medical terms showing up as troublesome in the rest of the corpus. With such a small sample of these terms, there were no overwhelming themes to observe except for that students who did display occasional vocabulary struggles outside of medical terminology were both students who learned Spanish as a second language and heritage learners.

3.4 Limitations

Although the data sample in this study is of excellent quality, it is not large enough to be considered generalizable, with only 12 student-interpreter participants. Furthermore, the corpus of transcripts only included one academic cohort, within one interpreting program. The large range of demographics of the interpreting students examined in this case study also make it difficult to isolate potential reasons for their struggles with the textual aspects of dialogue. Students ranged in age from 17 to 51, belonged to one of three different language profiles and

their life experience and educational levels varied significantly. One has to consider that 1/3 of students were still attending high school at the time they were enrolled in the Community Interpreting Certificate. Hence, they were still developing a plethora of professional, academic and interpreting skills. Thus, more longitudinal research, with larger sample sizes, other language pairs, and a larger number of interpreting studies programs is necessary for more conclusive results.

3.5 Conclusions

In examining salient mistakes, patterns and tendencies observed in the performance of interpreting students in unscripted role-plays, this study aimed to develop potential pedagogical tools for the medical interpreting classroom. Moreover, some overarching themes emerged. Firstly, there was not one language profile that rose to the top more than others when it came to overall interpreting performance. The top performing student learned Spanish as a second language, the second was a heritage speaker of Spanish, and the third learned English as a second language. Furthermore, many indicators such as non-translation, omission, serious omission, and addition did not appear to be more problematic for one type of student over another. While education and experience in the field might be factors that positively influenced performance, more thorough research that considers the intersectionality of students' varying identities is required. Interestingly, most students who performed highest overall, did not make as many inadequate mistakes when interpreting, but did display more language interference than other students. This may indicate that high-performing interpreters-in-training are still significantly influenced by the contact of L1 and L2. The students who performed most poorly included three heritage learners of Spanish and one student who learned English as a second language. These students tended to make less mistakes overall when it came to omission, vocabulary, and deficient expression. However, their strategies included interpreting shorter renditions by making information implicit or simply not interpreting utterances.

Students who learned Spanish as a second language appeared to make more improvable mistakes as compared to other language profiles, especially when it came to minor grammar mistakes and false starts/stutters. These students also produced significantly more deficient expressions, particularly in Spanish.

Finally, though all students were challenged by terminology, heritage speakers seemed to struggle the most with vocabulary. Since these students were also still finishing high school, however, this trend may be influenced by their age, lack of experience, and/or exposure to terminology. Continued research on the patterns that emerged with this data set may lead to more concrete understandings of the challenges specific to differing language profiles studied here. This study also intended to foster an empirical perspective and pursue solutions for more effective teaching in interpreting classrooms of mixed language backgrounds. Since omission, and non-translation appear as some of the most significant problems displayed by all students, more targeted exercises on memory strengthening, lexicon-building, and note-taking appear appropriate for this program, with the objective of better preparing students for their culminating 40-hour internship. Furthermore, as revealed by the grammar and vocabulary results of this study, the dominant language direction of these role-plays is English → Spanish due to the educating and medical questioning inherent to medical appointments in the US. For this reason, intentional work on grammar and vocabulary in the L2 (here Spanish), may be a beneficial approach for interpreting educators to keep in mind.

Finally, this research may add to resources that already exist for the interpreting classroom. The rubrics used to assess interpreting performance could be modified as tools for students to carry out self or peer evaluations. The term table compiled from these scenarios could also be used to aid students in creating targeted glossaries and mind-maps that prepare them for future simulated scenarios or real-life encounters. Finally, anonymized examples from these transcripts can foster conversation around how to problem-solve and prepare for the challenges students will face as professional interpreters.

To conclude, this case study reveals that including interprofessional collaborative practices in the form of unscripted role-plays in an interpreting curriculum can be an exciting learning exercise for students, educators, and community members, providing a stepping-stone for real-life application of effective language access beyond the classroom.

3.6 Funding information

3.7 Appendix

Figure 2: Example of role-play information sheet provided to all participating students

Standardized Patient: Camila Ramirez
Age: 80
DOB: 10/26/1938

Camila Ramirez, age 80, moved here 6 years ago from a Spanish-speaking country with her husband to be with her son and his family. Mrs. Ramirez left behind two sons and their families to continue working on the family farm. Mrs. Ramirez and her husband have been married for 62 years and raised all three sons on their family farm. She speaks only Spanish and will need the help of an interpreter. She is brought into the hospital this evening by her husband who is also Spanish speaking only. Her complaints include pain while urinating, having to urinate frequently, and feeling the urge to urinate even after having gone to the bathroom. She also has pain on her lower back on the left side. She reports that she has recently stopped drinking as much to limit how often she has to urinate as an attempt to limit her pain. She also states that she has had frequent periods of similar symptoms throughout her life (she estimates at least once per year for the last ten years), both while living in her country of origin and U.S.

Initial lab tests suggest a urinary tract infection (UTI) and the health care team will send Mrs. Ramirez home with a prescription for oral antibiotics twice daily for three days. However, due to the recurrent nature of her symptoms they are also ordering an abdominal ultrasound to rule out any anatomic urinary tract abnormalities. For the ultrasound, Mrs. Ramirez cannot eat for at least 8 hours.

Student's Mission: As a team, devise a plan to educate Mrs. Ramirez and her husband about a UTI. Teach them how to manage and treat the illness at home. Ensure that they know when they need to come back for the follow up appointment and what Mrs. Ramirez needs to do for the appointment.

Roles and Responsibilities			
Social Work	Nursing	Pre-Health Professional	Interpreters
Ensure that the patient has necessary information for discharge, and has	Provide education regarding prevention and treatment of UTI,	Explain the disease process for UTI and potential complications,	Ensure the patient and family member understand the information and are

necessary equipment, supplies, and resources for return home.	including approaches if symptoms persist.	including antibiotic resistance.	able to communicate their concerns

The following information should help guide the experience:

Patient position at start of scenario: Seated on the exam table

Patient dress at start of scenario: Clothes on

Potential questions and responses to guide the experience:

What is your age? 80
Are you married? Married
Occupation? Lived on a farm with husband until 6 years ago
What do you understand about urinary tract infections?
-   "Not much. I know in the past I have been given pills that have made it better."
Do you understand why you have another appointment?
-   "Not really."
Do you have insurance?
-   "No"
Do you have a car/transportation?
-   "No"
Do you have someone who could drive you?
-   "Not if the appointment is between 6 and 7. My son works from 6 in the morning until 7 or later at night. Plus, I don't think I can afford that."
Are you in pain?
-   "Yes, on my left lower back."
Are you drinking lots of water?
-   "No. It hurts when I go to the bathroom, so I was trying to not have to go as much."

Table 5. Detailed table of grammatical mistakes within the improvable interval

Student (Ss) and Language	Spanish Grammar Mistakes (88.5%)									English Grammar Mistakes (11.5%)					Totals
	Pronouns	Preposition	Article	Agreement (gender, #, S-V)	Ud. vs. tú confusion	Subjunctive	Verb conjugation	Ser / Estar	Other (Awkward /	Question formation	Sentence syntax	Preposition	No / not	Agreement (Subject –	
Ss1 (SSL)		3		2 (gndr)											5
Ss2 (HL)	2								1						2
Ss3 (ESL)										3	1	1	1		6
Ss4 (SSL)		2	2	2 (gndr) 1 (S-V)	1	2			1			1			12
Ss5 (SSL)	1	2	1	1 (#) 1 (gndr)	2	3									11
Ss6 (HL)	1	2	1	2 (gndr) 1 (artcl)			2		1						10
Ss7 (SSL)		2			1			1	1						5
Ss8 (SSL)	4	3		4 (gndr) 2 (#)			1								14
Ss9 (HL)		1											1		2
Ss10 (ESL)													1		1
Ss11 (HL)	2	1							3						6
Ss12 (HL)		1													1
Totals	10 (13%)	17 (22%)	4 (5%)	17 (22%)	4 (5%)	5 (6%)	3 (4%)	1 (1%)	7 (9%)	3 (4%)	1 (1%)	2 (3%)	1 (1%)	2 (3%)	77

Table 6. Abbreviated example of medical term assessment instrument

Original Medical Term	Interpreted term	Correct	Incorrect	Omission	Suggested term(s)	Student	# of times
Professional Titles							
1. Doctor(s) (10)	Doctor (2) Doctor (3) Doctor(es) (4) Proveedora (1)	1 3 1 1		1 3	Doctor(a), médico(a), proveedor(a)	12 1 9 8	10
2. Doctor(es) (5)	Doctor (1) Doctor(s) (4)	1 4			Doctor, provider	4 1	5
Anatomical Terms and Systems							
3. Body (5)	Cuerpo; órganos (1) Cuerpo (1)	1 1	1	1 1	Cuerpo	6 3 5	5
4. Cabeza (1)	Head (1)	1			Head	4	1

4. Article III: Professional and social impacts of Viterbo University's undergraduate community interpreting certificate program: Perceptions of recent graduates and community partners[29]

4.1 Introduction

The state of community interpreting in the US today is influenced by a plethora of factors that includes state and federal language access laws, certifying agencies, and professional associations. The cultural knowledge, awareness, and ideologies specific to regional communities also significantly impact the way interpreting as a profession continues to develop (Sawyer 2004). The growing number of training options available and the professionalization of the field over recent decades have created a need for continued research in the realm of assessing training for community interpreters. Inevitably, such research must consider methods and strategies carried out in the interpreting classroom and how such education is perceived to affect students beyond their studies. The impact of trained community interpreters in local communities underpins the quality of language access in private and public spheres.

Within Translation and Interpreting Studies (TIS) there is a growing body of literature that encourages action research (AR) for the purpose of examining teaching and practice, while also forewarning the need for careful design and implementation when employing this methodology (Angelelli/Baer 2016). Because AR is a methodological approach common in educational research and often employed with the objective of curriculum innovation (Hale/Napier 2013), it has been employed for the purpose of the present study as a means of program assessment for Viterbo University's Community Interpreting Certificate program. The action research "spiral," as defined by Burns (2010), requires recurrent planning, information collecting, data compilation, and implementation of new strategies. AR also aligns naturally with reflective teaching practice that is carried out for continual course, curriculum, and program improvement. With the joint, overarching objectives of reflective teaching practice and program enrichment,

the action research of this study specifically examines (1) graduates' perceptions of the certificate and its influence, and (2) the insights of community stakeholders who worked directly with the former students. By involving both recent graduates and external community members in this research process, the conclusions of this article can be viewed as the co-construction of knowledge, as a practical social engagement, and ultimately as a means for teaching and program improvement.

This study departs from a social constructivist approach, born within the fields of social psychology and sociology (Gergen 2019; Berger/Luckmann 1966). Within the realm of education, social constructivism points to the collaborative nature of learning within the classroom and, perhaps more importantly, in relationship to the larger community within which students practice, work, learn, and live. This shifts traditional teacher-student power dynamics toward the student-focused classroom where learners actively participate and collaborate in their learning processes, make sense of their own experiences, and eventually make their own offerings to co-constructed knowledge (Amineh/Asl, 2015). Within the field of translation studies, Kiraly asserts, "The development of true expertise can only be developed on the basis of authentic situated action, the collaborative construction of knowledge, and personal experience" (2014: 3). Therefore, social constructivist epistemology, in the present study, seeks to gather information around how community interpreting is co-constructed in this specific community between students and other external stakeholders participating in the program.

4.2 Literature review

As interpreter training programs and credentialing systems around the world advance, the need for more specific and extensive training in community interpreting has grown and gained more attention. Indeed, according to the International Organization for Standardization (ISO) guidelines, community interpreting is considered "… a profession, not … an informal practice such as interpreting performed by friends, family members, children, or other persons who do not have the competences and qualifications specified in this International Standard or who do not follow a relevant Code of Ethics" (ISO 2014). Therefore, the professionalization of the field has led testing and certification processes to come together with interpreter education (Hlavac

2015) so that interpreting programs, in many ways, guide trained interpreters to pass certification exams. Though credentialing systems are increasingly requiring or strongly suggesting complementary training and development, in some countries, certification still only requires one-time evaluations of interpreting competencies (Hlavac 2015). The growing scope of skill sets that are required to certify interpreters, therefore, reflects the bi-directional relationship of interpreter education and certification.

Beyond market-specific conditions driven by certification exams, the quality of the curriculum in interpreting programs is also influenced by a plethora of other cultural, legislative, political, organizational, and institutional intersections that may vary by country or region (Sawyer 2004). In the US, professional associations such as the American Translators Association (ATA) and the National Council on Interpreting in Health Care (NCIHC) are examples of important stakeholders that shape how the interpreting profession and interpreter training evolve and develop. These professional associations develop codes of ethics and standards of practice, are involved in local and national politics that advocate for language access for limited-English proficient (LEP) individuals, and provide professional development for interpreters. As part of a long-term strategy for advancing the field of interpreting in healthcare, for example, the NCIHC released National Standards for Healthcare Interpreter Training Programs (2011), which provides direction for interpreters, educators, and administrators. In turn, many educators use standards and recommendations from professional associations as a starting point for training (Fadeeva 2011).

In the realm of higher education, a significant study on one graduate translation and interpreting program argues that effective interpreting studies education is preceded by thoughtful curriculum design and assessment (Sawyer 2004). The present study, though focused on a smaller, undergraduate interpreting certificate, also seeks to evaluate both curriculum and assessment components of Viterbo's program. Here, the focus is on student and community perceptions of the program's influence as well as the application of the skills former students gained beyond graduation. Three significant teaching challenges highlighted in   Sawyer's study are essential when examining Viterbo's smaller undergraduate certificate: (1) designing curricula and the need for their regular revision; (2) effective and recurrent assessment; (3) successful pedagogical

practices (i.e., teaching methods) (Ibid: 5). These essential elements of any university interpreting program are studied in the present article by examining student-centered High-Impact Practices throughout the curriculum.

High-Impact Practices (HIPs), endorsed by the Association of American Colleges and Universities (AAC&U), are defined as time-intensive curriculum components that encourage learning and growth beyond the classroom, are rooted in significant connections with faculty and other students, foster cooperation with diverse individuals, and are supported with consistent and meaningful feedback (Kuh 2008). The incorporation of HIPs in undergraduate curricula has also been proven to promote deep learning and a variety of positive outcomes for undergraduate students, particularly when it comes to historically underserved minority groups in higher education (AAC&U 2023). As a strategic way to strengthen and grow the Community Interpreting Certificate at Viterbo, a HIP framework was integrated across the curriculum in alignment with student learning outcomes. The HIPs examined in this article include the fostering of collaborative projects and learning communities, e-portfolios, community-based learning, internships, and diversity/global learning. Each of these HIPs will be described in the results and discussion section of this paper, supported by the literature on these approaches and illustrated with reported student perceptions.

In terms of dialogue interpreting specifically, current literature calls for competent interpreting instructors, education, and training informed by research (Angelelli 2017). Cirillo and Niemants (2017) encourage continued empirical studies around curriculum components and assessment that may advance high-quality interpreting education and practice   . In this study, the teacher and administrator of the interpreting program is also the researcher, who aims to effectively train students by bridging research, theory, and practice. While the positionality of this action research is subjective, it may also lead to quality improvement of the curriculum, assessment, community outreach strategies, and overall impact of such education. AR has been proven to center the voice of students and improve the quality of the curriculum (Kur et al. 2008), the aim of AR in this study   is also to better understand how the HIPs of this interpreting program have been effective (or not) in the quest for language justice in our communities. As Mehl et   al. (2021: 1) affirm:

Language Justice is the right that we each have to communicate in the language(s) we feel most powerful; [...] Language Justice brings an analysis of power and privilege to the practices of interpretation, translation and facilitation; it […] seeks to create and sustain spaces where people can speak the language in which they dream, joke, cry, and hope, and where the intimacy of language as a part of who we are is valued and upheld.

The above definition in mind, and in conjunction with research-based pedagogy, this Community Interpreting Certificate program aspires to promote language justice within communities by empowering non-professional interpreter-students to practice more effectively.

4.3   Methodology

This 13-credit certificate consists of four undergraduate courses (Interpreting Principles, Interpreting for Cultural Humility and Ethics, Interpreting for Medical and Social Contexts and Interpreting for Business and Legal Contexts). All courses include skill-building exercises in the three major modes of interpreting (consecutive, simultaneous, and sight translation). The certificate also includes a practicum experience in which students observe a certified interpreter in the community for 10 hours and practice another 30 hours of interpreting under supervision.

It is important to note that while the researcher of this study was the sole professor, curriculum designer, practicum coordinator, and director of the Community Interpreting Certificate program of all 8 cohorts of students studied here, the curricular components of each cohort varied slightly, based on students' particular needs (specific grammar or vocabulary support based on language profiles, hard or soft skills based on life or professional experience, etc.). As the program has evolved and as a function of reflective teaching practice, assignments have been changed, modified, added, or eliminated. At times, challenging external factors (a global pandemic, expulsion of immigrants in area communities, etc.), also led to differences in teaching methods, classroom dynamics, activities, or assignments from one year to another.

Though previous empirical research had been done on specific curriculum components of this certificate, such as undergraduate research and unscripted role-playing in a simulation setting

(Pinzl 2023; Pinzl forthcoming), an overall assessment of the entire program had yet to be carried out. Thus, two surveys were designed for this study, one for graduates of the certificate and one for community partners. The overarching objectives of these surveys were to (1) examine how alumni of the Community Interpreting Certificate at Viterbo University perceived their experience in the program and its influence in their work as professionals after graduation and (2) examine how community partners perceived working with the students, graduates, and faculty of the interpreting program.

In this study, graduates from 8 academic cohorts (2015-2022) completed student surveys. Community partners included those that had close contact with the Community Interpreting Certificate from 2015 to 2022 (individuals from three hospitals and clinics, four school districts, three small businesses, two non-profit organizations, one national organization, one law firm and one bank).

The demographics portion of the surveys allowed participants to enter their understanding of their own identities in a text box rather than selecting from boxes constructed by institutions or other social norms. They were asked to fill in statements such as "in terms of __(ethnicity, race, sexual orientation, etc.)___, I identify as: _____." While an in-depth exploration of the intersectionality of survey participants may help us to see the complex and compounding challenges that underrepresented students face (Crenshaw, 1989), the focus of the present study was limited to observing the overall outcomes of the student experience. However, investigation about how differing identities of survey takers may be linked to their experience with community interpreting is a compelling topic for further research.

After demographics, the student survey examined the students' (1) experience in interpreting before and after the program, (2) perception of curriculum components, (3) perceptions of their internships on their future endeavors, and (4) awareness of notions related to diversity, equity, and inclusion in the communities they have served. As for community partners, surveys explored community members' (1) experience in working with Community Interpreting Certificate students, graduates, and faculty, (2) perception of working with student-interpreters during their internship experiences, and (3) awareness of notions related to diversity, equity, and inclusion in

the workplace. Because the graduate survey (comprised of 43 open-questions, 30 closed questions, two multiple-option dropdown questions, and one Likert scale question) included an extensive section about curriculum components, it was significantly longer than that of the community partners (28 open questions, 13 closed questions, two multiple-option dropdown questions, and one Likert scale question).

The surveys were distributed via email with the software Qualtrics and kept open for 19 days. Since the researcher was also the trainer in this study, measures to reduce the risk of significantly influencing the respondents were necessary. The first page of the survey was an information and consent form, which included survey objectives, risks and benefits of participation, data privacy, and the rights of participants. Only former students who had completed the program were invited to participate in the survey; current students were not allowed to participate to avoid potential skewing of results due to the fear of academic repercussions. Since both closed and open-ended questions were included in the survey, mixed methods were used to analyze results. More specifically, the quantitative results of yes / no or Liker-scale questions were complemented with the thematic qualitative results revealed through open-ended questions (670 qualitative responses from former students and 211 from community members). Notably, the teacher / researcher of this study maintained active relationships with most graduates and community partners over an eight-year time period. This likely accounted for the particularly high survey return overall, with a 77% (41 of 53) response rate of graduates of the Community Interpreting Certificate (2015-2022) and a 76% (19 of 25) response rate from community partners. The number of student graduates surveyed was more than double that of community partners. This, in addition to the fact that the community partner survey was shorter, accounted for significantly fewer qualitative insights of the latter, as observed in the following section.

4.4   Results and discussion

4.4.1   Graduates of the Community Interpreting Certificate

The following section includes four sub-sections. The first illustrates graduate demographics. The second reveals graduates' experience with interpreting before enrollment and after program completion. The third examines graduates' perceptions on the high-impact curriculum

components of the certificate. This section contains additional sub-titles that outline the four high-impact practices on which students provide feedback (collaborative projects and learning communities, e-portfolios, community-based learning, and diversity/global learning). The fourth and final sub-section reports the challenges, growing edges, and resiliency that students reveal as they made their way through this interpreting certificate program.

4.4.1.1 Demographics

The demographics of the interpreting graduates studied here reflect exceptional diversity, with largely differing life-experience and identities. The language pairs students worked with were mostly Spanish <> English and occasionally French <> English. Ranging from the ages of 18 to 71, some students enrolled in the program as early as their junior year of high school. Others were adult bilingual community members looking to enhance their skills, supplement current employment, or transition into a new career or retirement. The classroom, therefore, includes bilingual youth who have served as communication brokers for their families since childhood, single mothers, and older professionals with years of experience in the workplace. Such diversity in age, life experience, and professional skills provides an enriching space for exchange, reciprocal mentorship, and learning in the interpreting studies classroom.

In terms of country of origin, 41% of surveyed graduates were born outside of the United States mainland (32% in Mexico, 2% in Puerto Rico, 5% in Colombia, and 2% in China). Regardless of whether born within or outside of the United States mainland, many students in this program grew up speaking Spanish in the home, and thus, are considered heritage speakers. Indeed, 45% percent of respondents indicated Spanish as their first language and 50% English, comprising a richly diverse and complimentary classroom for linguistic skill-building.

As for ethnicity, most students identified as Hispanic (54%), followed by non-Hispanic (37%). In terms of race, 65% of respondents self-identified as White or Caucasian, 3% as Mestiza and 3% as Asian. Twenty-nine percent were grouped in a "non-traditional race" category since the designations they self-identified (Mexican, human, etc.) are not usually included as socially constructed race options. Twenty-six percent of surveyed students had an immigration status

other than US citizen such as undocumented or DACA (Deferred Action for Childhood Arrival) status. While individuals of any immigration status may enroll in the Community Interpreting Certificate at Viterbo, such factors may influence the type of opportunities available to certificate program participants after graduation. While the complex details of immigration statuses are beyond the scope of this paper, in order to understand the importance of this certificate in the community, it is essential to have an idea of the diverse landscape of immigrant identities within the program.

4.4.1.2 Experience before enrollment and after program completion

Given the aforementioned demographics, it is not surprising that 68% of graduates indicated that they interpreted for their family or community before enrolling in the Community Interpreting Certificate. Indeed, many graduates are in consistent contact with, or living within, immigrant communities in the United States, thus responding to the immense need for dialogue interpreting within such spaces. As is documented in non-professional interpreting research, the inherent position and socialization of such informal language brokers contributes significantly to the social inclusion of immigrant communities (Antonini et al. 2017). It may also be noted that bilingual youth may often feel obligated to help their families (Angelelli 2010). Indeed, 34% of survey respondents offered information specifically about interpreting for their families as children. One confirms that they interpreted "[j]ust for things like doctor's appointments, at a store, school related activities like conferences, and other little things like helping my parents talk to English speakers." In essence, graduates who were previously child language brokers often interpreted to facilitate contact between their families and the mainstream public from a young age, contributing to their extensive first-hand knowledge about the stakes of community interpreting, even if considered within the broader field of TIS as non-professional interpreters.

Some respondents who interpreted non-professionally before enrolling in the program were also students who did not live within the context of immigrant communities as native speakers or heritage speakers of Spanish, but who had exposure to international or immigrant individuals in other US contexts, where immigration is a constant contributor to local communities. One graduate explains, "For 15 years I picked apples during the autumn at a commercial orchard. As

an 'ad hoc' interpreter, I regularly assisted conversations between my hispanohablante co-workers and the orchard manager." Even internationally, several graduates elicit memories of family vacations or other experiences abroad where they facilitated language access between US English-speakers and locals in countries outside of the United States.

Though many students who enrolled in this community interpreting certificate interpreted long before beginning the program, currently only 46% are working in the field. That said, 85% affirmed they had interpreted for family or community members at some point after completing the program. Overall, graduates report having interpreted in an ever-growing radius as they continued into their professional lives: a total of four different US states (Wisconsin, Minnesota, Iowa, and Florida), 26 different US cities, and one city in Nicaragua. These interpreters have provided language access in eight clinics, hospitals, and community health centers; six public-school systems and two universities; five businesses and organizations; four local government agencies; and one US military base. Furthermore, several interpreters work as freelancers for interpreting service provider agencies, and 27% report volunteering as interpreters in some capacity. Indeed, the scope of services that are being provided over time in a range of local, rural, urban, and even international spaces is remarkable, even if most graduates are not currently working consistently in language access services.

Overall, graduates are also currently working in a large spectrum of fields outside translation and interpreting (T&I), some finding ways to make use of the communication and facilitation skills gained from the certificate program even if not formally interpreting. They found work as real estate agents, export specialists, store managers, executive and legal assistants, financial support coordinators, national field support supervisors, and employees in international business. Others hold positions in local schools, healthcare, or research. Those who are not currently working or volunteering as interpreters mostly attributed their lack of participation in the field to conflicts with other work, school, or full-time parenting. Several mention their previous work in interpreting as a gateway toward another career or report that they hope to interpret in the future. Some graduates expressed that they did not find their language skills to be sufficient or that they lacked a connection to the communities in need of language access for their language pairs.

However, language access advocacy may still remain a focus in their current professional roles as exemplified here:

After finishing the Interpreting Program, I continued my education, followed by starting a career. Though I am interested in interpreting, I am concerned that my skills have regressed and that I also do not know my community in the same capacity that I did while in the Interpreting Program and living in the La Crosse area. I also feel that my skills/education are better suited for interpreting/language advocacy.

Finally, respondents raised the issue of low pay and lack of opportunity, particularly for students whose legal status restricts their access to most formal work in the US. In light of the success and obstacles that former students experience beyond the program, we examine what curricular elements and high-impact practices of the certificate are perceived to have impacted graduates in their current endeavors in the following section.

4.4.1.3 Perceptions on High-Impact Curricular Components

4.4.1.3.1 Collaborative Projects and Learning Communities

Collaborative projects are described by the AAC&U as having two principal objectives: (1) learning to problem-solve and cooperate as a team, and (2) gaining insight and understanding via active listening about individuals with differing lived experiences and backgrounds (2023). Learning communities are established when such collaboration occurs over two or more linked courses as a group, and when shared topics "that matter beyond the classroom" are explored from the perspective of various disciplines (Ibid. 2023). Within interpreting studies, Krystallidou et   al. (2018) affirm the benefits for all participants of collaborative interprofessional practice carried out via role-playing and subsequent feedback exercises.

Indeed, the collaborative curriculum component that students found most beneficial of the certificate program was the role-play scenarios carried out in the clinical simulation lab , which resulted in the creation of a learning community with students from other disciplines (i.e., nursing, social work, other pre-health professions tracks). These simulated exercises took place

throughout the entire sequence of coursework, giving interpreting students the opportunity to practice, assess, and work to improve their performance over the academic year(s) that they were enrolled (Pinzl forthcoming). Eighty-five percent of graduates reported these hands-on simulated real-world experiences to positively influence their future endeavors, fostering an understanding of the stakes of the field and explaining how these scenarios led them to find work or additional research projects within the field. Others mention how these scenarios helped them to see their proficiency levels more clearly, work through feeling uncomfortable, gain confidence, and practice the vulnerability of peer-feedback in a low-stakes environment as illustrated here:

> "It was great practice, to know how I would work in a real-life scenario. We would sometimes challenge each other so we could prepare for real life situations. … [H]aving classmates observing and giving feedback was so helpful. Until this day, I go back to my practice and what I learned, especially in regards to professionalism, boundaries, and how to go about an uncomfortable situation."

By role-playing in the simulation lab, students lowered their affective filters and found "a safe place to make mistakes," where they felt they constructed understandings "without being embarrassed." Because interpreting studies education research affirms that conversation in concert with classroom role-playing may offer students authentic ways to problem solve interpreting scenarios (Niemants/Stokoe 2017), these simulated role-plays are always followed by debriefing with peers and the instructor and recorded via the simulation lab equipment. Graduates asserted that follow-up assignments that required them to watch their own performance gave them the opportunity to self-reflect, develop their skills, observe their progress, and carry collaborative skills into their professional careers.

4.4.1.3.2 E-portfolios

E-portfolios are a formative learning and assessment process with positive outcomes for students and teachers (Pujolà 2019). As outlined by the AAC&U, electronic portfolios guide students to compile their work over time, observe and analyze their personal and academic development, and share selections with others (peers, teachers, etc.) (2023). The compilation of e-portfolios

was required for all graduates of the interpreting program as a high-impact, student-centered curriculum and assessment component. From the lens of a social constructivist approach in the T&I classroom, assessment for the purpose of students partaking in the learning process has become the recommendation in lieu of a teacher's assessment of student learning (Fadeeva 2011). Research in T&I training affirms that effective assessment methods must be carried out regularly throughout a curriculum and should encourage students' participation in the process, fostering self-assessment skills that can reach beyond the time a student is enrolled in a program (Fadeeva 2011; Sawyer 2004).

Students of the Community Interpreting Certificate uploaded weekly audio recordings of their oral interpreting exercises into a virtual cloud that was also accessible to the instructor. Then, students were frequently required to listen to their recordings, reflect on their performance, and identify strategies for continued improvement. These reflections served as a foundation for constructive dialogue with the instructor throughout each academic semester and encouraged greater metalinguistic and metacognitive self-awareness. Seventy-two percent of graduates found e-portfolios to have influenced them after graduation, indicating improved self-assessment skills and abilities to observe their personal progress. One graduate affirmed, "It [the electronic portfolio] had such a great influence on me. I still look back at my recordings to fix what I used to be not so good at." Several also highlighted how their e-portfolio helped them to prepare for the oral portion of the national medical interpreter Certified Commission for Healthcare Interpreters (CCHI) exam.

4.4.1.3.3 Community-Based Learning

Community-Based Learning is an opportunity in which students apply knowledge and skills learned in class to real-world settings and then debrief these experiences with peers in the classroom (AAU&C 2023). The internship experiences of students of this interpreting program are considered community-based learning because they are carried out locally and without remuneration. Students' personal and peer-reflections about these internship experiences are carried out in the classroom in addition to a final reflection / capstone project. While some students wrote final papers about their practicum experience in the community, others designed a

final poster project that they then presented at the interpreting symposium and graduation celebration at the end of the program.

Many graduates named their internship as the most beneficial component of the interpreting certificate, primarily emphasizing the benefit of real-world experience, practice, and skill building, which led students to see their own improvement. Moreover, internships seem to help boost student confidence and overcome the anxiety of starting a career as an interpreter. Community connections and mentorship from supervisors and preceptors were also considered invaluable as exemplified here:

> "During my internship, I learned more than maybe any other time in my adult life. I was able to shadow and interpret under the observation of professionals from at least five countries, all with varied dialects and interpreting styles. The environment of my internship was one of deep mutual respect and daily continuing education. People in my department consistently ask one another's opinions regarding interpretation and ethical dilemmas. I also was able to receive immediate feedback when I interpreted, while having a team of people who believed in me, supported me, and were there to step in if I needed help. It also led to me being hired as an interpreter into the same department. Interning […] was honestly one of the best decisions of my life."

Indeed, 88% of surveyed graduates report that the skills that they learned within their practicum were applicable in their lives beyond the program. Specifically, they reported gaining professional, interpersonal communication, and memory skills, expanding on linguistic and cultural awareness, learning to affirm boundaries, and time management. In terms of language and presentational skills, several former students report advances in public speaking and improved vocabulary when it came to specific fields and linguistic varieties (of Spanish). They assert that their internships allowed them to practice strategies and problem-solving when it came to unfamiliar terminology. Though general interpreting skills were covered thoroughly within the coursework of the interpreting program, within their internships, graduates reported truly practicing their abilities to manage emotions, adapt to changes, listen actively, increase speed and fluidity, and take notes.

4.4.1.3.4 Diversity / Global Learning

The High-Impact Practice of incorporating diversity or global learning into the curriculum consists of fostering the exploration of cultures and perspectives that contrast students' own experiences. The AAU&C (2023) explains that global learning incorporates diversity that occurs nationally and/or internationally, examines challenging differences that result in inequities (racial, ethnic, gender-based, etc.) or ongoing global issues pertaining to human rights, freedom and/or power. Furthermore, global learning may be enhanced via community experiences related to DEI.

Ninety-four percent of surveyed graduates found they had learned something new about diversity, equity, and inclusion (DEI) while enrolled in the program. Throughout the certificate, students examine social identities and their relationship to privilege and power, systemic injustices, and contrasting cultural and personal views on ethics. Many referenced improved cultural humility and empathy for underrepresented communities, particularly LGBTQ+ populations. One respondent posits that the most beneficial or useful element of the Community Interpreting Certificate was:

> "Exposure to the systemic and historic structure of interpreting and how it relates
> to modern systems of power and socio-economic status. Learning the real-life
> implication of language and how LEP speakers, especially of languages of limited
> diffusion, are disadvantaged despite there being laws to provide assistance to
> them."

Language access laws were explored within the framework of language justice, which supports the beliefs that individuals have a right to express themselves in the language of their choice, that dialoguing across language allows for co-creation of aspirations, experiences, and communities, and that the de-centering of English in mainstream society is a form of empowerment before English dominance (Mehl et al. 2021). The graduate's comment above underscores a deep

understanding of the concepts of equity, inclusion, and language justice as related to the field of community interpreting.

Equally important, we see a recurrent inward gaze, indicating self-reflection, as students move through the world with their own identities. Indeed, Angelleli (2010) encourages instructors of bilingual youth, like the many in this interpreting program, to foster self-reflection on students' bilingualism with the objective of supporting them in exploring their own identities. Several young heritage speakers of Spanish in this study made comments about how contact with a variety of Spanish dialects helped them to understand language diversity. One such individual reports, "[T]here are so many different ways of saying things in Spanish. Just because someone speaks Spanish doesn't mean they speak the same Spanish as you". One L2 Spanish-speaker also explains, "Listening (and being part of the discussion) with peers of racially and ethnically diverse backgrounds […] helped me reflect on my own privilege". Apart from identity-building and cultivating respect for difference, graduate comments also affirmed that exploring other perspectives allowed them to improve their critical thinking, ethical decision-making, and capability to remain neutral in the role of interpreter.

Beyond the program, graduates were also able to identify problems or solutions in their current professional lives as related to DEI. Systemic and organizational issues in the form of racism, discrimination, and lack of equal opportunity were most salient. These former students offered interesting solutions to address structural issues such as creating work groups and data dashboards that could be used to quantify challenges and realities that need improvement in the workforce. A significant number also commented on using clarification and other communication skills as interpreters to address language variance and cultural diversity.

4.4.1.4 Challenges, Growing Edges and Resiliency

It goes without saying that the topics covered in the Community Interpreting Certificate at Viterbo, particularly as related to struggles around diversity, equity, and inclusion, can be heavy and potentially even re-traumatizing to those who have experienced racism, discrimination, and other inequities in their personal and professional lives. Undocumented students and students of DACA status are particularly vulnerable to high stress levels related to social, economic, and

political uncertainties (immigration status of themselves and their families, lack of job opportunities, etc.) that may significantly affect their emotional and mental health (Gámez et al. 2017). To better understand how addressing such topics within the field of interpreting affected students, several questions around mental health were included in surveys for graduates. Many revealed that their mental health was sometimes affected negatively, though most of these students expressed a growth mindset, considering the difficulties that they encountered to be a necessary part of the process. The most prominent challenge reported was the stress of completing coursework while juggling the rest of life's obligations (work, family, school, etc.). Several students also mentioned feelings of anxiety or low self-worth as they were challenged by interpreting exercises and assignments. As one person explained:

> "I […] started to doubt my capabilities to interpret while in the program. Looking back at it now, I think it was because in the past, I tended to compare myself with others while also having thoughts like "Why aren't you at that level?", "Why are you behind?". As I think about this now, I learned that everyone has their own growth, and it takes time."

Finding space for gentleness and self-care in the process of studying and carrying out community interpreting is a central learning objective for this program. Some graduates did mention their increased awareness of the need to care for their own mental health as an interpreter. One alumnus reflected:

> "At times my mental health took a toll when we would discuss difficult topics (mistreatment of LGBTQIA+ communities, the separation and deportation of families, etc.) but I always felt that I had the support I needed to work through it."

While the above graduate felt support, unfortunately 58% of surveyed respondents did not know that they had access to mental health services should they need them at Viterbo, and only 11% reported making use of such services to cope with stress or emotional trauma. This is clearly an area of improvement for this interpreting program, in need of further examination for the well-being of future students.

One means of resilience before such challenges was the overwhelming sense of community reported both internal and external to the program, which seemed to inspire students to complete the certificate. As one recounted, "[…] I made some great friends along the way, and we helped motivate each other. I was always excited to meet every week and see the group". Students also felt inspired by future goals, credentials, and career aspirations in the field of interpreting (i.e., presenting for the CCHI medical interpreting certification). Others had the people in their life and their former experience in mind as they completed the program:

> "[It was] My family and people around me that are limited English proficient. They reminded me that in the future, as I use my future interpreting skills, it will give them the confidence to know that their thoughts, questions and opinions are important. I also remembered about my life as a kid when I could not understand English as I had recently entered the United States with my family. I remembered how I felt and that gave me more motivation to continue whenever I started to lose motivation."

The above sentiments align with recent research (Gámez et al. 2017) that reflects the grit, resilience, and intrinsic impetus of immigrant students to provide a better life for themselves and their families and communities. Some also cite their parents as motivating factors for finishing, or the help of a professor who was able to encourage perseverance via mentorship. Most salient, however, was the intrinsic motivation students have to build inclusive communities.

4.4.2   Community partners of the Community Interpreting Certificate

The following section includes two sub-sections that illustrate (1) the demographics of the community partners of this study and (2) their perceptions about working with student interns and graduates of the program. This section helps to triangulate the qualitative survey data of this study to provide a more comprehensive understanding of how this interpreting program has contributed to community-building via quality language access education and services.

4.4.2.1 Demographics

In this study, community partners were individuals who worked with student interpreters during their practicum hours, with graduates after their completion of the program, or with the internship facilitator more generally. These community stakeholders held positions within major hospital systems, rural community health centers, free clinics, school districts, small businesses, non-profit organizations, and legal settings. Their job titles ranged from managers, directors, outreach specialists, lawyers, and business owners, to educators, counselors, interpreters, and banking representatives.

Community partners were overall older as compared to former students of the program, ranging from 35-72. In terms of ethnicity, 63% of respondents identified as non-Hispanic. In terms of self-identified race, 84% of respondents identified as white or Caucasian. As for country of origin, 90% of respondents indicated the United States. The majority (73%) indicated English as their first language. None of the community partner respondents were foreign born or indicated immigration statuses other than US citizens. Community partners also earned significantly higher levels of education than graduates of the interpreting certificate. Fifty-two percent of these survey participants were first generation college students (as compared to 61% of graduates).
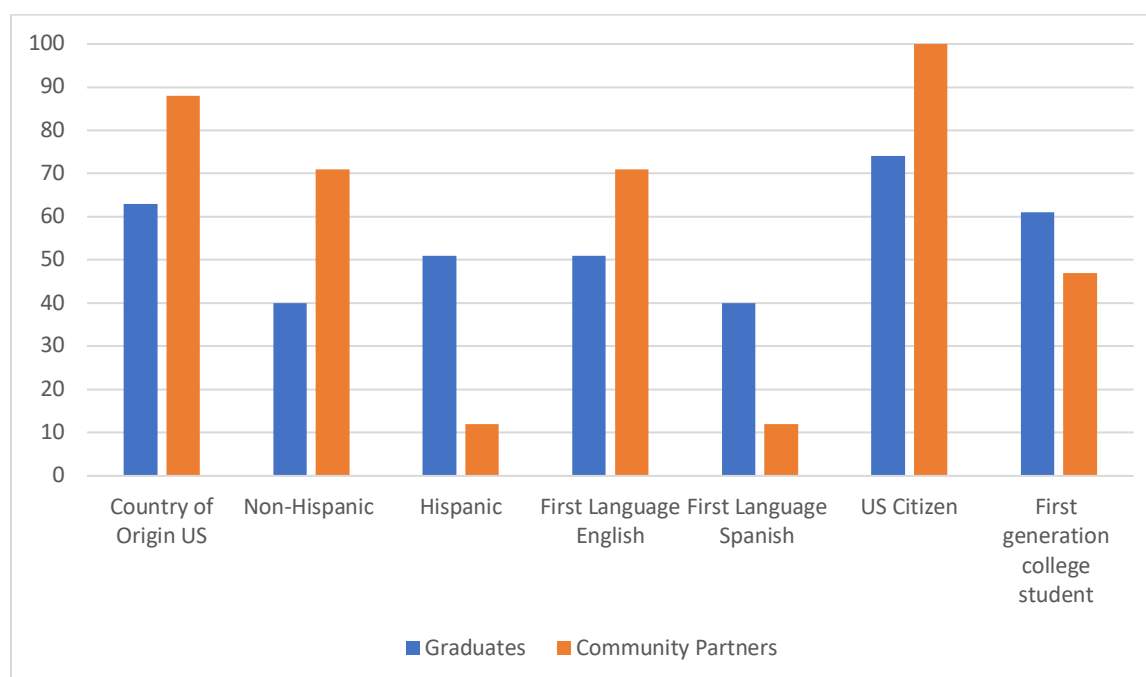
Figure 1. Key demographics of graduates and community partners

Thus, in comparing the demographics of graduates of the Community Interpreting Certificate and community partners of the program as illustrated in Figure 1, it is evident that community stakeholders are significantly more likely to be born in the US (thus US citizens), to be non-Hispanic, and to speak English as a first language. Furthermore, they are less likely to have been the first in their families to go to college. While the privilege and power dynamics notable here may be present for some (likely the foreign-born, Hispanic, first-generation former students who speak Spanish as a first language), it is uncertain in what ways these social identity undercurrents play out when community stakeholders and students come together. Further studies may reveal how such differences manifest in professional spaces where language access is required.

4.4.2.2 Working with interns and graduates

Community partners also report overall positive experiences working with aspiring professional interpreters from the interpreting certificate, with 83% reporting they had learned something new from interns. They also observe students' potential and growth during their practice in the field, reporting that students "shine and thrive," and commenting on their "increased confidence," their professionalism, and their attention to detail, even as they continue to learn.

When it came to working with graduates who had completed the interpreting program, community partners also described their experiences as rewarding and depicted graduates' services to be of exceptional quality. After working with students from the program, these professionals felt more comfortable and confident about seeking language access services. They also looked forward to encouraging new community members to enroll for the sake of continued community building and developed a greater sense of empathy toward interpreters. Moreover, 83% reported gaining a greater sense of community. As one reflected:

> "My perspective on the critical importance of trained and professional in-person
> interpreters cannot be underestimated. Early on in my professional career, I did
> not have enough of an appreciation of the impact of professionally trained

language support for our patients. I learned through the program how essential

that language support is."

The above quote underscores how learning is constructed together between interpreters and community members via contact, engagement, and shared experience.

One important suggestion that arose as a theme in the data was the lack of resources or training for future freelance interpreters. One owner of a language service agency stated that while graduates are "very professional and ready to work hard," they also "might need to know more about how to get freelance work." Several community partners also mentioned students' lack of freelance skills such as setting rates and communicating their needs as independent contractors. The advanced skills that community partners noticed in interns was broad. Most salient were students' bilingual language skills, their professionalism, and their community and cultural awareness. As one reported, "My interpreter brings her Latino (Mexican) culture and native tongue as a huge advantage. She is a member of the community here". On the other hand, some indicated that students still need to work on improving their professionalism within the field, particularly in regard to learning how to communicate, schedule, take notes, use simultaneous equipment, and understand the communities and cultures within which they are working. Other preceptors underlined the need for continued support of confidence and language skills related to fluency and terminology. These suggestions are valuable insights for program improvement.

4.5 Limitations

It must be acknowledged that the survey data collected here was exclusively written feedback, and further probing questions were limited by the nature of the instruments employed. With the objective of collecting additional qualitative data for future publication, the next phase of this research aims to employ focus groups or interviews that may reveal more nuanced accounts of the initial information that this study has provided. Future inquiries intend to examine the dramatically differing intersectional identities that exist between graduates and community partners to better understand how these differences might contribute to challenges such as discrimination and oppression across communities in the workplace. In particular, focus groups

and interviews with community partners may help add more information to the initial qualitative results of this study, because smaller numbers of stakeholders (as compared to graduates) yielded fewer insights in this first phase of research.

The subjectivity of this work is also a limitation, considering that this action research is based on personal and reflective processes of graduates, community partners, and the director / professor of the program. Finally, these findings are clearly non-generalizable in that this study examined one undergraduate program at one university in the United States. Nevertheless, this study compiles feedback from students and community members working with the program between 2015-2022, illustrating the influence of such education on former students and their communities over time.

4.6 Conclusions

The action research carried out and described in this article via surveys and mixed-method analysis explores the effects of High-impact Practices (HIPs) and varied assessment methods within the realm of one 13-credit university interpreting certificate. Results illustrate how this interpreting program reaches beyond the immediate spaces within which students learn, with the support of a social constructivist framework that encourages both students and community members at large to collaborate on mutual understandings of how community interpreting manifests and develops within their personal and professional lives. Areas of growth for this program are also revealed through this work, inspiring program improvement and recursive action thanks to the feedback of former students and community members who have engaged with the program. Thus, this study is an earnest attempt to connect curriculum design and classroom methodologies to language justice in our communities as well as to continue to encourage and better support the construction of knowledge around interpreting in both local and farther-reaching communities.

The perceptions of graduates of the Community Interpreting Certificate at Viterbo University reveal that this program was a stepping-stone for their future professional and academic endeavors, helping them to gain confidence and the social engagement necessary for both

personal development and professional success. Working within the realms of healthcare, education, government, military, social services, law firms, and other local businesses and organizations, graduates have inserted themselves professionally in communities that extend well beyond La Crosse, Wisconsin. Moreover, their understandings of diversity, equity, inclusion, and language justice were bolstered through their studies, experiences, and the relationships forged via their internships. Overall, a sense of civic engagement and empowerment is notable in these aspiring community interpreters. Community stakeholders also found that their interactions with students, graduates, and program faculty were overwhelmingly positive, fostering a deeper understanding about the experiences of interpreters, underrepresented community members, and language access in community settings. While community partners found interns and graduates to have an excellent foundation of professional skills, they also noted room for growth as these young professionals entered the field.

As for areas of improvement of the interpreting program itself, students may benefit from better training on how to obtain and carry out professional work as free-lance interpreters. This seems particularly important for undocumented students and students of DACA status, considering that several graduates affirm they did not pursue further work in the field of interpreting because they did not see a viable professional path due to their immigration status. Since even undocumented students could find ways to work as freelancers in the United States, a more intentional focus on honing freelance skills and opportunities could benefit both such undocumented students and their communities. Assuring that students understand where and how to access mental health services is another important way to better support students in future cohorts.

Though many of the graduates studied here began as non-professional interpreters or child language brokers who facilitated communication informally between mainstream and transient immigration populations, this study posits that the integration of a variety of high-impact educational practices into an interpreting certificate curriculum may have noteworthy professional and social impacts on communities in US contexts. Moreover, community interpreting training may serve as a stepping-stone toward more professional interpreting credentials within   the field (e.g., court or medical interpreter certification, higher degrees in interpreting or translation) and beyond.

Finally, through the provision of language access, well-trained community interpreters participate in centering the voices of the underrepresented in public and private spheres, leveraging their own lived experiences to bridge linguistic and cultural difference. Similarly, community stakeholders gain understanding   around language access with the help of these newly trained language semi-professionals who are agents of cultural change and direct contributors to language justice. In this way, communities may build knowledge together and become empowered to develop and grow collaboratively.

5. Conclusion

This doctoral thesis by compendium of articles centers collaborative teaching and learning via the pedagogical approach of implementing high-impact practices (HIPs) into the Community Interpreting Certificate curriculum at Viterbo University. Qualitative and quantitative methods are employed to analyze data in each publication, however the overarching methodological approach utilized here is principally that of action research, where the researcher is also the interpreting instructor and interpreting program director. The motivation underpinning this work is, therefore, not only reflective teaching practice but also program assessment that aims to improve both the quality of the curriculum and students' academic and professional experience.

The following conclusive remarks aim to answer the research questions laid out in the introduction, revealing the results of implementing high-impact practices into this program. Also, in an effort to respond to the repeated invitation of ITS research to bridge the gaps between theory, education and practice (Hale, 2007; Angelleli, 2008; Pöchhacker, 2010; Wadensjö, 2011; Cirillo & Niemants, 2017), these conclusions propose insights for students and practitioners, recommendations to educators and future avenues of research for scholars.

5.2 Results of implementing six high-impact practices into the Community Interpreting Certificate at Viterbo University

Since 2015, the Community Interpreting Certificate at Viterbo University has focused on six major categories of high-impact practices as methodological approaches in the classroom. A high-impact practice approach has been woven throughout the curriculum with the aim of meaningful learning experiences, student success and retention, the results of which are briefly mentioned here below. It may be noted that some of the specific pedagogical activities and projects highlighted in the following sub-sections may belong to more than one HIP category.

5.2.1 Collaborative projects

Collaborative projects are described by the American Association of Colleges and Universities (AAC&U) as having two principal objectives: "[1] learning to work and solve problems in the company of others and [2] sharpening one's own understanding by listening seriously to the insights of others, especially those with different backgrounds and life experiences" (2024). Many such projects are incorporated across the four courses of Viterbo's Community Interpreting Certificate curriculum.

One example of these collaborative projects are the mini-debates carried out in the *Interpreting for Cultural Humility and Ethics* course of the program. Students are frequently asked to discuss in small groups ethical questions and dilemmas pertinent to a broad range of scenarios encountered in community interpreting, before sharing and debating their ideas as a larger classroom activity. In the *Interpreting for Medical and Social Contexts* course, students discuss and debate terminology before collaborating to create glossaries for terminology-specific healthcare and social scenarios. A third example of a collaborative assignment in this program is the planning and carrying out of the Annual Community Interpreting Symposium and Graduation Celebration. This project requires students chose a theme, invite guests, and present their 40-hours of practicum work in the community to an audience of practicing interpreters, community stakeholders, mentors, school administrators, peers, and family members. As discussed extensively in articles I and II of this thesis, undergraduate research and interprofessional role-plays are also examples of successful collaborative classroom projects that foster active learning in the interpreting studies classroom.

5.2.2 Undergraduate research

Though the action research projects that students carry out in this interpreting program can also be considered collaborative projects when carried out in partners or small groups, the work of undergraduate research is considered a separate HIP category by the American Association of Colleges and Universities. According to the AAC&U, "The goal is to involve students with actively contested questions, empirical observation, … and the sense of excitement that comes from working to answer important questions" (American Association of Colleges and Universities, 2024).

Data from surveys carried out in this thesis, (but unpublished in article III due to word limitations), reveal that 51% of surveyed students in Viterbo's interpreting program from 2015-2022 reported carrying out undergraduate action research in order to answer important questions that they had about interpreting in their own communities[30]. Article I revealed that students perceived undergraduate research to have fostered growth in their social, interpersonal, academic and research skills, as well as their personal and professional development. Surveys from article III confirmed these findings and also highlighted how this academic experience supported students' future endeavors. Graduates reported that their research projects helped them to apply for jobs and master's programs as well as complete research beyond this interpreting program. Furthermore, students learned to see the work of interpreting itself from a less anecdotal, wider viewpoint, with the aim of achieving future positive change. One graduate reflects:

> "Research is a means to identify inequity and advocate for system change. While interpreting is often person-to-person focused, research allowed me to connect to the larger landscape. In identifying shortcomings, I can better advocate for change and generate discussion. In my current role at the State, research and data underlies everything that we do and the changes we aim to implement. We don't know what we don't know and the research influences system-wide changes."

In addition to gaining more perspective, students also saw the bigger picture in terms of the current state of the field and their research projects heightened their awareness about the need for language access in local communities. Another graduate reported:

> "I didn't fully understand how needed interpreters were until I carried out my research at the company I was working for. Even a lumber manufacturing company in the middle of nowhere needs interpreters. Having the skill will be useful at any company."

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[30] See Appendix A for the raw data about graduate perceptions of the Community Interpreting Certificate at Viterbo that was gathered from article III surveys.

Such practical realizations are important as the field of community interpreting continues to professionalize and gain momentum across the US. In a mostly rural Mid-west region, graduates affirm the need for language access in schools, agriculture and healthcare. As explored in article I of this thesis, students who carried out undergraduate research perceived that they had gained in their abilities to collaborate with other researchers through their work. In addition, the initial findings of this first publication highlight that the practice of mentoring students through undergraduate action research has the potential to empower students and engage them in their local communities.

5.2.3 Learning Communities

Also revealed in article I, was that students felt more a part of a learning community as a result of their undergraduate research projects. Learning communities are established when such collaboration occurs over two or more linked courses as a group, and when shared topics "that matter beyond the classroom" are explored from the perspective of various disciplines (American Association of Colleges and Universities, 2024). Because this work was carried out over two courses in spring semester and culminated in the dissemination of the research results, the undergraduate action research projects that students carried out in groups may also fall into the learning communities HIP category.

Another example of building learning communities in this program is through the frequent role-playing and consequent debriefing that occurs throughout the curriculum. Non-scripted role-playing in Viterbo's Clinical Simulation Learning Center was explored as an interprofessional education collaborative in article II of this thesis.

While this second publication focused mostly on how students of different language profiles performed on textual aspects of dialogue interpreting, article III of this thesis observed students' perceptions on how this curriculum component had a positive effect on their professional development. Reportedly, 85% of surveyed graduates found that role-playing and debriefing as a

learning community boosted their success in future endeavors and/or led them to find employment in the field[31].

5.2.4 Electronic portfolios (e-portfolios)

Within the realm of ITS as applied to education, Pujolà (2019) affirms electronic portfolios as a means of formative assessment that contribute positively to students' learning outcomes. As outlined by the AAC&U, e-portfolios "enable students to electronically collect their work over time, reflect upon their personal and academic growth, and then share selected items with others, including professors, advisors, and potential employers" (American Association of Colleges and Universities, 2024).

Throughout all courses of this program, students recorded interpreting exercises in all three major modes of interpreting (simultaneous, consecutive and sight translation) which they uploaded to a shared virtual cloud. Students then wrote self-reflections on their interpreting challenges, skills, and progress. While recordings and reflections were always shared with the professor, some assignments were also required to be shared with classmates. In this way, students received self, peer, and instructor feedback, creating a constructive dialogue from various perspectives around students' work. As reported in article III of this thesis, 72% of surveyed graduates reported that e-portfolios had a positive influence on their work beyond the program and fostered both self-assessment and self-efficacy skills. Since research in the field of interpreting has underscored the need for interpreting programs to support students' self-esteem and self-efficacy as a means of fostering better student learning outcomes (Bates, 2016; Moore, 2020), this high-impact practice may be one way to encourage such skills by means of formative assessment.

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[31] This statistic comes from the data collected from surveys carried out for article III of this thesis. While unpublished in the article for reasons of word limitations, the raw data from which this number is derived is included in Appendix A of this dissertation.

5.2.5 Community-Based learning

Community-Based Learning is an opportunity in which students "both apply what they are learning in real-world settings and reflect in a classroom setting on their service experiences" (American Association of Colleges and Universities, 2024). Community-Based learning was most apparent in this program in observing the work that students carried out via their community interpreting internship experiences. All students of the program are required to carry out 40 practicum hours, which include roughly 10 hours of observing a certified interpreter in community contexts and 30 hours of practicing interpreting with supervision. Over the course of the program, students are required to keep a log of practicum hours and write short reflections about their experiences. They are also asked to reflect out-loud in the classroom as the certificate program advances. By comparing the challenges, surprises and accomplishments that are carried out in a broad range of contexts (medical, educational, agricultural, legal, etc.) students co-construct understanding of the ways that interpreting is occurring in their communities. Finally, students must present via poster presentation their work (often in pairs) at the final event of the program, the annual Community Interpreting Certificate Symposium and Graduation Celebration. Given all the elements of the internship experience, the discussion of this work throughout the coursework of this interpreting program and the collaborative nature of disseminating their contributions as a cohort, this Community-Based learning activity may also be considered a high-impact collaborative project and/or a high-impact learning community.

5.2.6 Diversity and global learning

The final HIP explored in this thesis, is that of encouraging diversity and global learning throughout the curriculum of this community interpreting certificate program. The AAU&C explains that global learning may:

> "… address US diversity, world cultures, or both—often explore "difficult differences" such as racial, ethnic, and gender inequality, or continuing struggles around the globe for human rights, freedom, and power. Frequently, intercultural studies are augmented by experiential learning in the community ..." (American Association of Colleges and Universities, 2024).

This program encourages interpreters-in-training to explore their own intersecting identities in the interpreting classroom and other training spaces. Furthermore, students are asked to examine how privilege works to normalize some identities and cultural practices over others. The aim is to encourage community and empathy within interpreting and translation circles. In addition, this pedagogical approach is meant to help students identify instances where privilege manifests as racist behavior or has been established in racist policies, reproducing, or perpetuating privileged and oppressive frameworks.

Via identity-building exercises, personal reflection, and facilitated group discussion in the classroom, surveyed students reported gaining a deeper understanding of identity politics and began to better recognize privilege as it transpired. These techniques not only empowered students to continue advancing the profession, but also had the potential to mitigate the intersectional failures of language policy, while centering minoritized voices.

Again, pulling from unpublished raw data collected for article III[32], a few sentiments from students about diversity and global learning have been included here to illustrate the impact of this pedagogical approach. The following interpreting graduate reveals how they continue to push against systemic inequities in the workplace for the benefit of underrepresented communities after completing the interpreting program:

> "Across Wisconsin we see the [negative] impact on community health when diversity, equity, and inclusion are not integrated into policies and programs. In many work projects, we are integrating these practice components to address structural issues that lead to poor health outcomes. There are many diversity, equity, and inclusion pieces coming to fruition including forming work groups and creating data dashboards to quantify the diversity of our workforce."

Such reflections inspire hope that if interpreting graduates and community partners harbor these sorts of convictions and work together toward change, that they will also continue to promote

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[32] For access to the raw data, see appendix A of this dissertation.

language justice within their communities. Furthermore, including global learning into the interpreting curriculum gave some students the tools to see and respond to issues in the workplace related to diversity, equity, and inclusion. One former student, now a practicing medical interpreter remarks:

> "I see DEI [Diversity, Equity, and Inclusion] issues on the organizational level by interpreter services not being utilized, and by staff members not being trained on how to use the services. This is problematic because even though interpreters exist and there are organizational policies requiring staff to use interpreters and other language services, this is not the reality, and many individuals are deprived of their right to an interpreter. Additionally, I hear problematic comments about our service users' race, educational background, country of origin, documentation status, etc. from staff members and even from certain interpreters."

Acknowledging a certain amount of despair in the above comment, it must be stated that no academic interpreting program can fix all problems of systemic racism, discrimination, or injustice at large. Yet, this former student has the capacity to talk about the injustices that they witness. Below the indigence there is a rumbling. The hope is that interpreting students might learn to better navigate such realities with training and mentorship, inspiring others, and eventually larger systemic changes for the common good.

5.3 The role of effective mentorship

Similar to themes presented about high-impact practices above, literature within the field of mentorship suggests "collaborative and mutual learning partnerships" as an effective mentorship strategy for organizational learning processes (Buck, 2004: 8). Literature within higher education has underscored how the psychological challenges of underrepresented populations (such as those of DACA or undocumented statuses) seem to lead students to seek their own mentors and conjure their own resiliency as they navigate educational systems (Gámez, Lopez & Overton, 2017). Though emerging literature advocates for the incorporation of formal mentorship programs into interpreter education curricula (Rogers Drewek, 2023), more research is necessary

to better understand how mentorship incorporated into interpreting training curriculums may play a positive role in student learning outcomes.

Article I of this thesis raises the topic of mentorship within interpreting training, as it examines the relationships that may help to guide undergraduate research. Frequent contact, as recommended in the literature (Dubois & Neville, 1997), and the fostering of bi-directional relationships as part of a multi-mentor model (Newton & Wells-Glover, 1999; Jacobi, 1991) were carried out to support student retention and success. However, mentorship in this interpreting program was not limited to only the research process that students carried out. It was also present in the frequent one-on-one meetings between professor and student, particularly those carried out with high school students and others who were struggling with the coursework. Furthermore, guest speakers, sometimes former students of the program themselves, offered advice and encouragement to upcoming students, fostering more robust "communities of practice" as recommended by D'Hayer (2013). Some of the feedback from students and community partners about mentorship within or as a result of their connection with Viterbo's community interpreting program is examined in the following sub-sections. The following data was again derived from the research conducted for article III, however left out of the final publication.

5.3.1 Graduates' perceptions on mentorship in Viterbo's interpreting program

Of the 41 surveyed graduates of the Community Interpreting Certificate at Viterbo, 77% reported that they received mentorship while enrolled[33]. The surveys of this study defined mentorship as "a dynamic, learning partnership built on trust," and affirms that, "It is possible to both give and receive mentorship, have more than one mentor, and experience mentorship in a variety of ways." Indeed, 38% of former surveyed students also found themselves in the role of mentorship during the program. As one graduate explained, "When I came to this country, there were not many interpreters, so I had to better myself to help others like me."

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[33]For access to the raw data, see appendix A of this dissertation.

Overall, most former students found mentorship either through the colleagues and supervisors that they worked with during their internships or via the relationships that they formed with the professor of the program. Some also mentioned peer-mentorship relationships, mentors that were assigned via coursework, or those that were self-sought or developed organically via personal community contacts. Fifty-two percent affirmed that one of their mentors was an alum of the interpreting program. A multi-mentor model that fosters a professional community as well as mentorship beyond academic programs is reflected in the following student comment:

> "I grew personally through mentors as our friendships developed. We created a safe space to discuss topics, both professional and personal. I think the shared experience of providing medical care (and interpreting in medical care) brings about many difficult topics that challenges us as people. In this way, we grew through those challenges and got to know each other well."

Moreover, graduates of the program emphasized how confirmation, acceptance, guidance, support, and real-life exposure led them to build self-confidence within the field of interpreting. Furthermore, exposure to real-life professional experiences and the role-modeling that accompanied such exchanges were particularly formative. While mentorship seemed to have helped students to build stronger personal and professional identities, graduates also mention how the connections and personal relationships they forged continued beyond the program and propelled them into future career paths and endeavors. Finally, mentorship appeared to foster a desire in former students to serve as mentors themselves in the field of interpreting.

5.3.2 Community partners' perceptions on mentorship as related to Viterbo's interpreting program

Since mentorship in this work was defined as dynamic and reciprocal, nineteen community partners of Viterbo's interpreting program were also surveyed about their perceptions of mentoring and receiving mentorship. Sixty-three percent of those surveyed felt they had mentored someone from the Community Interpreting Certificate by providing, guidance, support, exposure, and advice. Some explained their work with interpreting interns as, "an honest look at what interpreting is like," and reported helping students understand both the "background of the

community" and the roles and needs within it. Other aspects of mentoring that also came up as prevalent were coaching, role-modeling, challenging students, feedback, door-opening and helping them with coping strategies. One supervisor stated, "…I'm … [available] as a sounding board to talk through patient situations when they arise. I do make myself available to the students should they have questions / concerns [that] they don't feel comfortable talking about with the staff interpreter." The above quote underlines the layers of mentorship that can occur within organizations. While direct preceptors of students may serve as the principal mentors to aspiring interpreters, supervisors of those preceptors also made themselves available should additional support be necessary.

Given the differing life experiences between interpreting students and community partners, a rich potential for reciprocal mentorship relationships could transpire. However, only 32% of community partners felt that they had received mentoring from someone in the Community Interpreting Certificate[34]. Those that did, cited primarily that they received guidance, and feedback. However, several also mention that individuals from the interpreting program challenged them as well as provided support, role-modeling, friendship, advice, and introduction to other professionals. The notion of reciprocal mentorship also appeared in the open-ended answers of respondents. As one affirms, "They [student-interpreters] helped us [and] we tried to encourage them and give them field experience." Several community members also mention being mentored from the director of the program in terms of receiving feedback and suggestions, learning about ethics and skill-building for interpreting and managing issues with student interpreters. Finally, a few respondents stated that they grew professionally by working with the program because it helped them to appreciate the impact of their own facility on the community at large and gave them "insight into the [interpreting] program and its outcomes." These comments speak to the reach of the program and the transformative effect an interpreting program may have on the larger public.

Given these insights, it appears that student retention and success in this community interpreting certificate hinge on at least two important factors: (1) the integration of HIPs into training

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[34] Raw data collected from surveys disseminated to community partners for article III of this dissertation may be found in Appendix B of this dissertation.

curriculums and (2) effective mentorship. Undoubtedly, there are numerous other variables at play. However, HIPs and mentorship are two pedagogical components that have arisen in this interpreting certificate as significant and deserving of further study. The results showcased in this section illustrate the intention of broadly contributing new research on overarching pedagogical approaches that may be effective for interpreting education/training.

5.4 Concluding remarks on published articles

The following sub-sections briefly review the specific objectives, methods, and results of each article of this dissertation as part of an iterative process of quality improvement for Viterbo's Community Interpreting Certificate Program.

5.4.1 Article I: Undergraduate action research as a high-impact mentorship practice

Article I of this thesis surveyed a small, yet diverse sample of students owning mostly underrepresented identities within higher education (first-generation, low-income, Latino/a/e…). First, this article aimed to measure *students' perceptions* of the quality of student learning that occurred in carrying out undergraduate action research (SRQ1). Second, this article sought to understand how the practice of mentoring students through undergraduate action research empowers students and engages them in their local communities (SRQ2). The implementation of undergraduate action research into this interpreting curriculum as a high-impact mentorship practice resulted in 25 perceived gains in terms of students' social and interpersonal skills, general academic skills, research skills, and their personal and professional development.

By channeling students' natural curiosity and providing a methodological means to finding answers to their questions about interpreting in their own social spaces, these budding researchers identified everyday places to engage with their peers, their community members, and important community stakeholders (real estate agencies, government agencies, dentists, farmers, etc.) about language access. Not only did students work together to co-create new understandings through this work, but they also learned to trust the developmental, and academic mentorship that they received through peers, academics, and professionals in the research process. Ultimately, this project culminated in the dissemination of their work in an academic forum

where other more experienced interpreting practitioners were able to view, provide feedback and encourage students' action research about language access in their communities.

Supporting students through the challenging process of carrying out and disseminating action research allowed these aspiring interpreters, regardless of their cultural background or language profiles, to examine their lived experiences, inquire more deeply and gather information in a more systematic way. Both heritage speakers and second language learners explored realities and produced evidence about the existing deficits in their daily lives as related to language access, allowing them to see where they might effectively insert themselves in their own neighborhoods. Through the process, they discovered the enduring assets that prevailed in their own social spaces, including their own bilingual skills and cultural awareness. Thus, students found a sense of empowerment to become agents of social change and connection. The implementation undergraduate action research into Viterbo's Community Interpreting Certificate as a high-impact mentoring practice was collaborative, multi-faceted and multi-directional. As a result, the research mentor of this initiative also gained profound new connections and humbling considerations from the students who carried out their research projects. This HIP, accompanied by strategic mentorship, is an example of how undergraduate student researchers, educators, practitioners, and community members can co-construct knowledge by giving power to the voices of the underrepresented and less privileged.

5.4.2 Article II: Non-scripted role-playing with heritage speakers and second language learners

Article II of this thesis examined students' performance in simulated non-scripted role-plays that took place in the context of the interprofessional medical interpreting classroom. Students and faculty members from differing disciplines cooperated to create and carry out medical scenarios that targeted skills necessary for successful patient outcomes. In this case-study, English-speaking students in the fields of nursing, pre-medicine, and social work collaborated to provide patient education, explain the causes and treatment of disease, and assure that Spanish-speaking patients had necessary information and resources. Interpreting students were tasked with providing the language access necessary for all parties to understand the information being exchanged in these simulated medical scenarios.

After carrying out the role-plays, students debriefed the scenarios to provide and receive feedback about how these classroom exercises transpired. Theses debriefings included the students (role-players and observers), participating faculty members of each discipline involved, and community members who played the role of patients with limited English proficiency. Through conversation, students were given the opportunity to understand new perspectives on the impacts of their work on potential community members. This sort of simulated scenario proved a useful, low-stakes and practical stepping-stone to prepare students from various health-profession fields for future real-life scenarios. Because these collaborative role-plays were designed progressively and carried out regularly over the course of the academic year, an interprofessional learning community was created in which meaningful skill-building and topics areas were explored from the point of view of various disciplines.

Beyond establishing this classroom exercise as a beneficial high-impact practice for students, this study sought more specifically to understand how interpreting students of three different language profiles (heritage speakers of Spanish, second language learners of English and second language learners of Spanish) interpreted the textual aspects of dialogue in a clinical simulation lab (SRQ5). Consequently, this article also intended to project what, if any, teaching techniques might emerge through this case-study as useful, necessary, or detrimental for specific language profiles or identities within a diverse classroom (SRQ6).

Overall, no student language profile appeared to interpret these role-play scenarios better than others, and all interpreting students struggled to some degree with omission and terminology. Surprisingly, students who interpreted the best overall also displayed the most amount of language interference. Some errors did emerge as more problematic for certain language profiles. Heritage speakers, for example, were most challenged by vocabulary. However, most of these students were still in high school, therefore such results could reflect their lack of experience and exposure to terminology. The data from this study also revealed that students who learned Spanish as a second language produced the most 'deficient expressions' and made the most 'improvable' mistakes (especially related to grammar and false starts/stutters).

Because no language profiles interpreted overall better than others, and all students struggled with omission and terminology, targeted exercises for memory, improved vocabulary and note-taking appear appropriate for *all* students. One particularly interesting take-away of this study was that the dominant language direction of the unscripted patient-provider dialogues was consistently English to Spanish. Since providers in US medical settings tend to have a more active role of asking, explaining, or educating than patients (who are often in the position of passive listening and simple response), this dynamic emerged naturally in the simulated role-plays studied here. Students carrying out the roles of caretaking in these simulations (nurses, doctors, social workers, etc.) spoke significantly more to patients than vice versa. Regardless of what this means about power structures and cultural hierarchy, this dynamic creates a prominent language direction that interpreters in these contexts must learn to manage. For this reason, one teaching technique that might be useful to employ in the medical interpreting classroom is to focus intentionally on interpreting skills and vocabulary required in the English to non-dominant language direction as a first step, before practicing in the opposite language direction.

In light of these initial results and suggestions, it is important to emphasize that the sample size of this case-study was small, and therefore the conclusions of this research are non-generalizable. Further investigation is, hence, necessary to gain a more comprehensive understanding about how specific language profiles perform in unscripted simulated role-plays. That said, fostering learning communities via interprofessional role-playing collaboratives in an interpreting studies curriculum is an example of a high-impact practice that may help students, educators and community members co-create knowledge around language access to be applied to the real world beyond the classroom.

5.4.3 Article III: Professional and social impacts of Viterbo University's interpreting program on recent graduates and community partners

Article III of this thesis aimed to examine how graduates and community partners perceived their experience with the Community Interpreting Certificate at Viterbo University. Graduates from 2015-2022 were surveyed about their experience in the interpreting program and its influence on

their work as professionals after graduation (SRQ3)[35]. This survey for graduates included questions about curriculum components, mentorship, and notions of social justice and equity. Community partners were also surveyed about working with students, graduates, and faculty of the interpreting program and whether it had affected their personal and professional understandings of language access in the community (SRQ4). The community partner survey examined how mentorship, experience with program participants and notions of social justice and equity were perceived by community partners who work directly with the program[36].

Responses from both surveys revealed how a 13-credit undergraduate interpreting program reaches beyond the interpreting classroom. In working with student interns and graduates, community partners disclosed sentiments in their survey answers about diversity, equity, and inclusion that signaled a growing understanding about systemic inequities in society.

In addition to gaining insight on perceptions of the program and its influence, this case-study also sought to determine what, if any, teaching techniques were useful, necessary, or detrimental for specific language profiles or identities within a diverse classroom (SRQ6). Overall, students affirmed that high-impact practices and mentorship were largely beneficial to their learning processes. However, a salient failure that emerged from both students and community stakeholders was the lack of training that students received in terms of working as freelance interpreters. Notably, students of the most precarious immigrations situations (the undocumented) were in most need of such training. Indeed, these students often did not pursue careers in interpreting because they felt unable to obtain such work. As one student graduate revealed, "If I had DACA [i.e., an immigration status that provides permission to work in the United States] I would totally put my interpreting certificate to use by getting a job as an interpreter." A second recent graduate affirms, "My work opportunities are limited because of my legal status being undocumented." Freelancing is one way around the dilemma of having to provide a social security number to obtain a job in the United States. Thus, teaching students to effectively set free-lance rates, correspond professionally with stakeholders requiring interpreting

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[35] For the raw data, see Appendix A of this dissertation.
[36] For the raw data, see Appendix B of this dissertation.

services and create invoices for interpreting jobs, are skills that can result in getting paid as an independent contractor, rather than as an employee on the official payroll of businesses, institutions, and organizations.

In conclusion, the Community Interpreting Certificate at Viterbo University does appear to provide training and mentorship models that empower aspiring interpreters to practice more effectively. Moreover, the program serves to improve common understandings for graduates and community partners around the importance of language access services in local communities. However, while newly trained language semi-professionals may be agents of social change and contributors to language justice, empowerment to work as interpreters in the community is limited for those with an undocumented immigration status. For these reasons, targeted work on both a program and institutional level to support these students in free-lance work beyond completion of the program is essential for their futures. Ultimately, this research reveals that, issues of inequity for students are identifiable even within a program that seeks to irradicate injustice in communities at large.

5.5 Recommendations for aspiring interpreting professionals

A 13-credit academic community interpreting program like the one studied in this doctoral thesis – even when housed within an institution of higher education in the United States -- does not grant official state or national certification to interpret in the community, nor does it earn students a four-year undergraduate degree in translation and interpreting studies. It does not necessarily mean that student graduates are highly trained and have impeccable vocabulary in their A and B languages, nor that they can keep up flawlessly with a 150-word pace in the simultaneous mode—just yet. Completing this program also does not mean that trained interpreting students will stop interpreting as non-neutral parties for their families, friends, and close community members. On the contrary, with some sources citing some 11 million young language brokers in the US today (Valdez, 2023), it is likely that students who have already been interpreting in the community before enrolling in programs such as this one will continue to do so.

While many of the former, current, or future students of this undergraduate program may not graduate from this certificate as fully established professional interpreters, a training program like this one is a steppingstone toward facilitating better communication between languages and cultures that is based in personal and professional codes of honor. It seems plausible that students who complete this program and ones like it will have a better sense of their skills as language and communication brokers. These students may have a better grasp of what language access services look like in their communities and how they might play a role in pushing their work toward something more accurate, more skillful, more beneficial for the community members for whom they bridge the gaps. These students may continue to civically engage from a place of more knowledge, empowerment, and confidence.

Hopefully, graduates of Viterbo's Community Interpreting Certificate Program will continue to become aspiring professionals in the quest for language justice, providing access to information, communication, and services that monolingual interlocutors would not be able to access without them. Hopefully, they will make their own offerings to co-constructed knowledge in their neighborhoods, in their families, in their schools, and beyond. As such, they will do so in the languages and cultures that the people that they live amongst understand. As such, they will become agents of social justice and social change.

5.6 Curricular recommendations for interpreting educators

The overarching recommendation for interpreting educators that emerges from both the work of these three academic articles and my overarching work as an interpreting professor since 2015, is that interpreting training programs should aim to create learning communities that work together to co-construct knowledge and foster empowerment for the end goal of more language justice in our societies. As a means of concluding this doctoral project, and based on the results of this study, four general recommendations with eleven specific take-aways are proposed here for consideration when training non-professional interpreters to work more confidently and effectively to provide language access. These suggestions are meant to train aspiring interpreters to provide language access in ways that may also empower their communities. Rather than prescriptive instructions, these offerings reveal lessons learned and provide suggestions meant

for continued experimentation. The hope is that these recommendations are useful not only to educators, but also to practicing interpreters, students, and communities in need of language access. While none of these methods are new and all have certainly been proposed by other scholars within and exterior to the field of ITS, the intention here is to contribute more insight on how these strategies may be particularly effective in the context of interpreting classrooms with diverse students of mixed language profiles.

5.6.1 Recommendation #1: Design high-impact, community-focused, collaborative assignments.

High-impact practices, defined and endorsed by the AAC&U (2024), that are focused on community and collaborative in nature seem to encourage the creation of a shared sense of understanding and eventual student empowerment. The HIPs outlined below resulted in transformative learning for the students of the 8 cohorts of interpreting students studied in this project. Further exploration of how these tasks may function in other programs is necessary for a more comprehensive understanding of how these approaches may work in other contexts.

- **Collaborative projects.** Collaborative projects (creating glossaries as a class, working through case-studies, presentations, etc.) are those in which students work together to problem-solve, team build and listen actively to one another and those with which they are working. Examples of such projects addressed in this dissertation include the undergraduate action research described in article I or the interprofessional educational collaborative carried out via non-scripted roleplays described in article II.

- **Learning communities.** Learning communities occur when the same group of learners collaborates over several courses or explores a topic from various disciplines. In the work carried out here, learning communities naturally evolved out of the aforementioned collaborative projects that stretched across the interpreting certificate curriculum.

- **Undergraduate action research in local communities**. Providing opportunities for action research as a high-impact practice appears in this doctoral project to encourage students toward civic engagement. Through the process, it may also empower both students and underrepresented

communities. When carried out in partners or small groups, and disseminated in group settings, this sort of pedagogical approach becomes a way to both incorporate collaborative projects into interpreting curricula and facilitate learning communities, especially when carried out over the course of several classes or an academic year. For more information on mentoring students through undergraduate action research please refer to article I of this dissertation.

- Unscripted interprofessional role-playing. Practicing unscripted role-plays that involve students and professionals from a variety of disciplines can create simulated scenarios that imitate the complexity of interpreting in the real world. This high-impact and collaborative practice involves various stakeholders (educators and students from different fields, community members willing to play the role of limited English proficient individuals, etc.). In addition to encouraging interprofessional collaboration that may better prepare interpreting students for their future interpreting assignments beyond the classroom, when done as a series of exercises that include debriefing performance over time, this activity may also establish cohesive learning communities. For more information on unscripted interprofessional role-playing, please refer to article II of this dissertation.

- Community-Based learning. Community-Based learning is different than learning communities because it refers to communities outside the traditional classroom. Community-Based learning requires students to first apply what they have learned through coursework to a larger community setting and then return to the classroom to reflect on these experiences with their classmates. Requiring and debriefing experiences that take place in the community at large, such as internships, is a way to scaffold the learning process for students who are preparing to move into more professional interpreting roles upon program completion. For more ideas on ways to facilitate Community-Based learning, please refer to article III of this dissertation.

- Diversity and global learning. Incorporating diversity and/or global learning into interpreting curriculums compels students to contemplate humanity by observing difference and questioning existing power differentials, disparities and/or inequities in current systems. Since such considerations are at the center of language access in our communities, addressing these topics is of utmost importance for a more comprehensive understanding of what is at stake when

providing interpreting services. For details on topics related to diversity, equity and inclusion, and their perceived effects on students, please also refer to article III of this dissertation.

5.6.2 Recommendation #2: Create smaller assignments and tasks that encourage necessary skill-building for textual aspects of dialogue interpreting.

- **Exercises targeting memory strengthening, lexicon-building, and note-taking.** Regardless of their language profiles, novice interpreting students generally struggled significantly with omission and terminology when carrying out unscripted role-playing tasks in the interpreting classroom studied here. For this reason, education that continues to focus on memory, vocabulary and effective notetaking appears to remain necessary for interpreting programs with largely non-professional student demographics.

- **Intentional work on grammar and vocabulary in the non-dominant language direction (Spanish, in this case-study).** Whether due to existing power structures and cultural hierarchies or the nature of explaining medical-related concepts to patients, the dominant language direction observed in simulated clinical scenarios studied here revealed significantly more interpreting from English into the non-dominant societal language (here Spanish). For this reason, focusing first on terminology and grammar structures into the non-dominant language may be of great use when working to improve skills in such contexts.

5.6.3 Recommendation #3: Provide feedback while involving students in their own assessment.

- **Electronic portfolios**. Proven to be positive for both students and educators alike, e-portfolios are a formative assessment and learning process that have been proven to be positive for both students and educators (Pujolà, 2019). Asking students to build an electronic portfolio of audio recordings that curates their interpreting progress is a means for students to develop self-assessment skills by reflecting in written or oral formats. In addition, students may also share audio selections with peers, instructors, mentors, or even future employers (American Association of Colleges and Universities, 2024) for feedback or to provide evidence of their skills and progress over time. For more details on student perceptions of e-portfolios, see article III of this dissertation.

- **Debriefing in learning communities**. Debriefing the learning process in a classroom learning community can serve as an effective form of assessment. As mentioned previously, debriefing role-playing is one example of this sort of formative assessment, which students of this study affirmed to be effective in learning and problem-solving. Another way to debrief in learning communities is to foster regular conversation around observations and lessons students learned in their community-based internships.

5.6.4 Recommendation #4: Encourage multi-mentor models and mental health services to support student success.

- **Collaborative, multi-faceted, bi-directional mentorship from a variety of individuals.** Mentorship models that encourage students' developmental growth and academic achievement have proven essential in this work. In articles I and III, students describe mentorship flowing from peers, program alumni, supervisors, educators, parents, and other community members. Such a multi-mentor model is practical in that it provides a larger network of support for students, which may continue to grow. Moreover, many students also found themselves providing support to their own communities as they worked through the program, highlighting a mutual mentoring arrangement that is built on solidarity and common experience.

- **Support for mental health.** Despite the good intentions of instructors and institutions to disseminate information about mental health services, many students may still not understand how to access such support. In this doctoral work, more than half of surveyed graduates reported lack of knowledge that services were available to them as students. Hence, it appears essential that students have access to such information in various formats beyond a link in the syllabi, a general announcement on the first day of class or an occasional verbal reminder. Further support might include personal outreach to students who seem to be struggling, walking students to counseling services on campus, inclusion of mental health service links in triggering assignments and incorporating the presence of mental health professionals in difficult classroom discussions.

5.7 Future inquiries for researchers:

The literature review pertinent to the development of this thesis has required a wide interdisciplinary lens, spanning the topic areas of mentorship and education in the fields of ITS, education for heritage speakers and high-impact practices in higher education. Within these frameworks, the literature calls for more research-based teaching materials designed for the 'mixed' language classroom (Carriera, 2016), more understandings around the specific skill sets of heritage speakers or second language learners (Mellinger & Gasca-Jimenez, 2018) and more links between research, education, and practice ((Hale, 2007; Angelleli, 2008; Pöchhacker, 2010; Wadensjö, 2011; Cirillo & Niemants, 2017). Beyond these needs for more empirical studies, the challenges of teaching and mentoring bilingual students (often with previous non-professional experience) to carry out language access more professionally has also guided this research. Though the work laid out in each of the publications presented here has set out to contribute to these fields of inquiry, it has also inevitably led to further questions, providing the opportunity to envision future research in a number of directions.

The process of research of this thesis has led to discoveries about ways to improve or build upon the methodology here employed. More structured peer-reviewed methods, for instance, could help to mitigate the subjectivity of the action research that was carried out. To move away from the reliance on self-reporting measures and retrospective data found specifically in articles I and III, focus groups or interviews with students and community partners of this program or similar interpreting programs may reveal more complete, critical, and constructive accounts of the initial information gathered here. Such methods may also compliment written feedback, such that further probing questions carried out in real time may capture more nuanced understandings of subjects' perceptions and responses. Finally, larger sample sizes could contribute to more conclusive metrics for any current or future research questions set out to be answered.

As for spheres of inquiry that this work could inspire, article I has the potential to propel further research on the effects of undergraduate action research on students and communities. Since completed research naturally leads to more questions, asking future students to build upon the findings and research questions of previous cohorts' examination of their own communities, may

advance discoveries about where and how to implement better language access on a local level. Such collaborative and longitudinal research may also encourage continued cohesion and understanding of community needs and assets in light of language justice.

Furthermore, article I could serve as an impetus for further research on students' need for mentorship as they move from novice to semi-professional interpreters. Specifically, researchers might ask: what role does peer-mentorship play in the learning communities created in interpreting programs? What sorts of peer-mentoring programs might prove to retain underrepresented students and help them to complete training programs or attain certification? Considering a growing program with more students every semester, the student-professor mentorship relationship described in this case-study may be forced to change over time due to human resources. Thus, what benefits might be attained if student graduates of this community interpreting certificate served as peer-mentors for future cohorts?

Article II focuses on the textual aspects of dialogue interpreting performance in students, leaving out the essential need to also consider the interactional elements of discourse (Wadensjö, 1998). Examining the interactional aspects of these dialogues would contribute to a more well-rounded picture of students' performance in the classroom by including competencies that go well beyond the technicalities of language and are equally important in conversation analysis (body language, managing communication flow, etc.). Since this article took an outsider/observational approach to studying students' performance, it might also be interesting to ask former students to study the transcriptions of their own renditions or to observe the videos of their own work to see how they make meaning out of their performance as aspiring interpreters. An insider perspective may create a more complete picture of student needs as they complete their training. Additionally, and as alluded to previously, larger sample sizes that include more interpreting programs and language profiles would help to better understand the specific struggles that students may face based on their language pairs, backgrounds, and personal identities. Indeed, this article aligns with a growing body of research that advances a convincing need to better understand how to apply effective methodology for classrooms with mixed language profiles (heritage speakers and second language learners). If future research aims to better grasp how the specific skillsets or

challenges of language profiles manifest in the interpreting classroom and beyond, more effective methods for teaching interpreting may be achieved for all students.

The third and culminating article of this dissertation contributes to understandings about the achievements and failures of the Community Interpreting Certificate at Viterbo University. Firstly, more longitudinal studies, as a part of continual assessment practices, which distribute the same surveys caried out in this study may help identify how this undergraduate interpreting certificate continues to shift and change in the future. Indeed, the results of this case-study has inspired new program shifts and interventions, aiming to invite future opportunities for sustained research and on-going improvements to teaching methods and practices.

Since responses in both student and community stakeholder surveys revealed that more extensive training on free-lance work for interpreters is a necessary addition to the program curriculum, future research might work to evaluate how the incorporation of information and skillsets related to independent interpreting work might affect interpreting graduates in future cohorts. This avenue of action research may be particularly useful to undocumented students in the United States who otherwise may not be able to find traditional interpreting employment with hiring organizations and companies. Indeed, further investigation about how US immigrations statuses affect students' self-perceptions, motivations to work or ways that they carry out interpreting services in the community may be essential to more profound understandings about how to best support student demographics typical to interpreting programs such as the one studied here.

Students also reported that while they did sometimes struggle mentally and emotionally with the interpreting content presented in this program, almost half did not know about the mental health counseling available to them. Furthermore, extremely low rates of students stated that they utilized such available services. In response to this gap, a deeper examination of the kinds of mental health that students struggle with and what services they might be interested in receiving is a compelling line of research. This is another way to continue to improve student experience, interpreting programs and the long-term effects of language access services in the community. Indeed, the places that students choose to access mental health services while enrolled in interpreting studies training seems of utmost importance to the success of individuals beyond

their studies. Furthermore, careful research that investigates the sorts of materials within interpreting programs that may be traumatizing or re-traumatizing to students with immigration experience could lead to more supportive and compassionate practices on the part of instructors. In fact, building on studies that examine the emotional state and stress of student-interpreters (i.e., Foulquié-Rubio & Rojo Lopez, 2020) may lead to more sustainable and successful long-term outcomes for aspiring community interpreters. Case studies that include counselor support during and after difficult classroom conversations, for example, may be strategies worth researching empirically to understand and obtain the best possible mental health outcomes for students. Finally, collaborative research between the fields of mental health and ITS would be an excellent way to continue building bridges between language access professionals, educators, and healthcare providers.

Another interesting avenue for further inquiry might examine the largely differing identities between interpreting students and community partners that welcome interpreting students and graduates into their professional spaces. While the interpreting students of this program are majority Latino/a/e, first generation, and coming from immigrant communities, the community stakeholders they work with as service providers are largely US citizens, non-Hispanic, speaking English as a first and only language. Take, for instance, the first-generation Mexican American student-interpreter of Oaxacan parents, who provides language access between a local Wisconsin dairy farmer and his mostly undocumented Mexican farmhands. The contrast between such dramatically differing and complex intersections of identities may be a fascinating line of research to contemplate—feasible for the context within which Viterbo's program is located, though still largely unexplored.

Such research may lead to more nuanced understandings of challenges such as discrimination and racism between communities as well as unobserved oppression and blind spots due to privilege and power dynamics in the workplace. Focus groups and interviews with both students and community partners around these themes may help to contribute more information to the initial findings of article III of this thesis. More importantly, however, is the prospect that such conversation across communities may even lead to eventual restorative justice models in our

communities as related to race, ethnicity, language, and other topics that emerge inevitably in the context of community interpreting services.

While students and community partners were surveyed in this initial research project, one group of particularly important stakeholders within the realm of language access who were not examined were the limited English proficient (LEP) individuals who receive interpreting services themselves. Without question, future surveys, focus groups or interviews about how this interpreting program affects the community must also include LEP community members' perspectives about their experience with Viterbo's Community Interpreting Certificate interns and graduates.

In conclusion, there is much left to unveil about effective teaching methods for formal community interpreting programs at colleges and universities. The profound impacts that such education may have on the intricate and diverse communities that make up both rural and urban landscapes may lead to more cohesive, compassionate, and empowered modern societies where well-trained interpreters, as linguistic and cultural mediators, may better facilitate the co-construction of human knowledge and understanding.

Bibliography

This uniform, updated bibliography of all the references of this doctoral thesis follows the American Psychological Association's (APA) 7th edition for citation and formatting guidelines.

Albarino, S. (2022, August 11). *New proposed rule on section 1557 may expand language access in US healthcare*. Slator. https://slator.com/new-proposed-rule-section-1557-may-expand-language-access-us-healthcare/

Allen, K. (2024, January 26-27). *Rising to the challenge: How do we ensure effective next gen interpreter training?* [Keynote presentation]. Sharpening our tools: A symposium for Interpreter Trainers, National Council of Interpreters in Healthcare. Online. https://www.ncihc.org/assets/Trainer-Symposium/Symposium%202024%20Program%20Final%20Jan2024.pdf

Allen, T. D., & Eby, L. T. (Eds.). (2010). *The Blackwell handbook of mentoring: A multiple perspectives approach*. John Wiley & Sons.

Álvaro Aranda, C. & Lázaro Gutiérrez, R. (2021). La formación en interpretación sanitaria y su camino hacia la profesionalización: Un análisis de itinerarios formativos propuestos desde distintas entidades en España. *Panace@ XXII*(53) 69-77.

American Association of Colleges and Universities. (2024). *High-Impact Practices*. https://www.aacu.org/trending-topics/high-impact

American Association of Interpreters and Translators in Education. (2024). https://www.aaite.org/

American Immigration Council. (2024). *Immigrants in Wisconsin*. https://map.americanimmigrationcouncil.org/locations/wisconsin/

American Psychological Association. (2017). *Education and socioeconomic status.*
https://www.apa.org/pi/ses/resources/publications/education

American Translator's Association. (2024). *About Us.* https://www.atanet.org/about-
us/#:~:text=Founded%20in%201959%2C%20the%20American,and%20interpreters%20i
n%20the%20U.S.

American Translator's Association. (2022, August 18). *New proposed rule on section 1557 of the
Affordable Care Act may expand language access in U.S. health care*.
https://www.atanet.org/industry-news/new-proposed-rule-on-section-1557-of-the-
affordable-care-act-may-expand-language-access-in-u-s-health-care/

Angelelli, C. (2008). The role of the interpreter in the healthcare setting: A plea for dialogue
between research and practice. In C. Valero-Gracés & A. Martine (Eds.), *Crossing
borders in community interpreting: Definitions and dilemmas* (pp. 147-163). John
Benjamins.

Angelelli, C. (2010). A glimpse into the socialization of bilingual youngsters as interpreters: the
case of Latino bilinguals brokering communication for their families and immediate
communities. *MonTI. Monografías de Traducción e Interpretación*, (2), 81-96.

Angelelli, C. (2016). Looking back: A study of (ad-hoc) family interpreters. *European Journal of
Applied Linguistics*. *4*(1), 5-31.

Angelelli, C. (2017). Bilingual youngsters' perceptions of their role as family interpreters: Why
should their views be measured? Why should their views count?. In R. Antonini, L.
Cirillo, L. Rossato & I. Torrensi (Eds.), *Non-professional interpreting and translation:
State of the art and future of an emerging field of research* (pp. 259-279). John
Benjamins Publishing Company. http://doi.org/10.1075/btl.129.13ang

Angelelli, C., & Baer, B. J. (2016). *Researching translation and interpreting*. Routledge.

Antonini, R. (2010) The study of child language brokering: Past, current and emerging research. *mediAzioni* 10, http://mediazioni.sitlec.unibo.it

Antonini, R. (2016). Caught in the Middle: Child Language Brokering as a Form of Unrecognised Language Service. *Journal of Multilingual and Multicultural Development* *37*(7), 710-725.

Antonini, R., Cirillo, L., Rossato, L., & Torresi, I. (Eds.). (2017). *Non-professional interpreting and translation: State of the art and future of an emerging field of research* (Ser. Benjamins translation library, volume 129). John Benjamins Publishing Company. https://doi.org/10.1075/btl.129sx

Arjona-Tseng, E. M. (1990). *Curriculum policy-making for an emerging profession: The structure process, and outcome of creating a graduate institute for translation and interpretation studies in the Republic of China of Taiwan* (Order No. 9024310) [Doctoral dissertation, Stanford University]. ProQuest. https://www.proquest.com/openview/0a5ac5b47d5005aaa4458c9020c1561e/1?pq-origsite=gscholar&cbl=18750&diss=y

Arumí, M., & Rubio, G. (2022). Reflecting on past language brokering experiences: how they affected children's and teenagers' emotions and relationships. *Multilingual, 42*(1), 1-23. https://doi.org/10.1515/multi-2021-0152

Arumí, M., & Vargas-Urpi, M. (2018). Annotation of interpreters' conversation management problems and strategies in a corpus of criminal proceedings in Spain: The case of non-renditions. *Translation and Interpreting Studies*, *13*(3), 421-441.

Australian Institute of Interpreters and Translators Inc. (2023). *We are the national association for the translating and interpreting profession.* https://ausit.org/

Baker, M. & Saldanha, G. (2011). *Routledge encyclopedia of translation studies* (2nd ed.). Routledge.

Bancroft, M. A. (2015). *The community interpreter: An international textbook.* Culture & Language Press.

Bates, K. S. (2016). *Anxiety and self-efficacy within interpretation* [Master's thesis, University of Kansas]. KU ScholarWorks. https://kuscholarworks.ku.edu/bitstream/handle/1808/22024/Bates_ku_0099M_14899_DATA_1.pdf?sequence=1&isAllowed=y

Bellamy, C. E. (2007, March 1). *Serving the under-served: Banking for Undocumented Immigrants*. American Immigration Council. https://www.americanimmigrationcouncil.org/research/serving-under-served-banking-undocumented-immigrants#:~:text=More%20and%20more%20banks%20now,consulate%20in%20the%20United%20States.

Berger, Z., & Peled, Y. (2022). (In)equidad sanitaria e idiomática en las comunidades latinx de EE. UU. *AMA Journal of Ethics*, 313-318.

Bontempo, K. & Napier, J. (2007). Mind the gap!: A skills analysis of sign language interpreters. *The Sign Language Translator and Interpreter, 1*(2), 275-299.

Brownell, J. E., & Swaner, L. E. (2009a). High-impact practices: applying the learning outcomes literature to the development of successful campus programs. *Peer Review*, *11*(2),

26. https://link.gale.com/apps/doc/A205051358/AONE?u=anon~3cff1080&sid=googleScholar&xid=828e8e2f

Brownell, J. E., & Swaner, L. E. (2009b). Outcomes of high-impact educational practices: A literature review. *Diversity & Democracy*, *12*(2), 4-6.

Buck, M. A. (2004). Mentoring: A promising strategy for creating and sustaining a learning organization. *Adult Learning*, *15*(3-4), 8-11.

Burns, A. (2009). *Doing action research in English language teaching: A guide for practitioners*. Routledge.

Carreira, M. (2016). A general framework and supporting strategies for teaching mixed classes. In D. Pascual y Cabo (ed.), *Advances in Spanish as a heritage language*, *49*, 159-176. John Benjamins.

Certification Commission for Healthcare Interpreters. (2018). *The History of Healthcare Interpreter Certification.* Retrieved June 10, 2023 from https://cchicertification.org/uploads/2018-CCHI-History.pdf

Certification Commission for Healthcare Interpreters (2024). *Certified Interpreters.* https://cchicertification.org/certified-interpreters/

Chi, H. (2021). *Problemática textual e interaccional de la interpretación judicial entre el español y el chino en asuntos penales. Estudio descriptivo basado en casos reales* [Doctoral dissertation, Universitat Autònoma de Barcelona]. Dialnet. https://www.tdx.cat/handle/10803/672854#page=1

Cirillo, L., & Niemants, N. (2017). *Teaching dialogue interpreting: Research-based proposals for Higher Education.* (Vol. 138), John Benjamins Publishing Company.

Clark, R. C., & Mayer, R. E. (2016). *E-learning and the science of instruction: Proven guidelines for consumers and designers of multimedia learning*. John Wiley & Sons.

Clark, T. S. (1997). *Mentorship: A Sign of the Times: A Guide to Mentoring in the Field of Sign Language Interpretation*. National Clearinghouse of Rehabilitation Training Materials, Oklahoma State University.

Colina, S., & Angelelli, C. V. (2015). T&I pedagogy in dialogue with other disciplines. *Translation and Interpreting Studies. The Journal of the American Translation and Interpreting Studies Association*, *10*(1), 1-7.

de Varennes, F., & Kuzborska, E. (2016). Language, rights and opportunities: The role of language in the inclusion and exclusion of indigenous peoples. *International Journal on Minority and Group Rights, 23*(3), 281–305. https://doi.org/10.1163/15718115-02303004

Del Río-González, A. (2021). To latinx or not to latinx: a question of gender inclusivity versus gender neutrality. *American Journal of Public Health*, *111*(6), 1018–1021. https://doi.org/10.2105/AJPH.2021.306238

D'Hayer, D. (2013). Public service interpreter education: A multidimensional approach aiming at building a community of learners and professionals. *Interpreting in a changing landscape: Selected papers from critical link, 6,* 321-337.

Dietrich, S., & Hernandez, E. (2022, December 13). *Nearly 68 million people spoke a language other than English at home in 2019*. Census.gov. Retrieved April 21, 2023, from https://www.census.gov/library/stories/2022/12/languages-we-speak-in-united-states.html

Drew, P., & Heritage, J. (1992). *Talk at work: Interaction in institutional settings.* Cambridge University Press.

Drugan, J. & Tipton, R. (2017). Translation, ethics and social responsibility. *The Translator* *23*(2), 119-125. https://doi.org/10.1080/13556509.2017.1327008.

DuBois, D. L., & Neville, H. A. (1997). Youth mentoring: Investigation of relationship characteristics and perceived benefits. *Journal of community psychology*, *25*(3), 227-234.

Eby, L. T., Allen, T. D., Evans, S. C., Ng, T., & DuBois, D. L. (2008). Does mentoring matter? A multidisciplinary meta-analysis comparing mentored and non-mentored individuals. *Journal of vocational behavior*, *72*(2), 254-267.

Ennis, S. R., Ríos-Vargas, M., & Albert, N. G. (2011). *The hispanic population: 2010*. US Department of Commerce, Economics and Statistics Administration, US Census Bureau.

Exec. Order No. 13166, 3 C.F.R, 65 (50121-50122), (2000). chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.govinfo.gov/content/pkg/FR-2000-08-16/pdf/00-20938.pdf

Fadeeva, N. U. (2011). An Analysis of Interpreter and Translator Training and Assessments Abroad. *Journal of Siberian Federal University Humanities & Social Sciences 4*(3), 400-409.

Falbo, C. (2016). Going back to Ancient Egypt: Were the Princes of Elephantine really 'overseers of dragomans'?. *The Interpreters' Newsletter 21*, 108-114. https://dx.doi.org/10.13137/1591-4127/13734

Flores, G., Abreu, M., Barone, C. P., Bachur, R., & Lin, H. (2012). Errors of medical interpretation and their potential clinical consequences: a comparison of professional versus ad hoc versus no interpreters. *Annals of Emergency Medicine, 60*(5), 545–53. https://doi.org/10.1016/j.annemergmed.2012.01.025

Foulquié-Ruvio, A. I, & Rojo Lopéz, A. M. (2020). Emociones e interpretación en los servicios

    públicos: aproximación desde el aula. In. L. Sanfelici & A.I. Foulquié-Rubio (Eds.),

    Traducción e interpretación: entre investigación y didáctica (pp. 261-270). Peter Lang

    AG.

Gámez, R., Lopez, W., & Overton, B. (2017). Mentors, resiliency, and ganas: Factors

    influencing the success of DACAmented, undocumented, and immigrant students in

    higher education. *Journal of Hispanic Higher Education*, *16*(2), 144-161.

García, E., & Weiss, E. (2017, September 27). *Education inequalities at the school starting gate:*

    Gaps, trends, and strategies to address them. Economic Policy Institute.

    https://www.epi.org/publication/eduation-inequalities-at-the-school-starting-gate/

Gibbs, P., Cartney, P., Wilkinson, K., Parkinson, J., Cunningham, S., James-Reynolds, C.,

    Zoubir, T., Brown, V., Barter, P., Summer, P., MacDonals, A., Dayananda, A. & Pitt, A.

    (2017). Literature review on the use of action research in higher education. *Educational*

    action research, *25*(1), 3-22.

Haldar, S., Pillai, D., & Artiga , S. (2023, July 6). *Overview of health coverage and care for*

    individuals with limited English proficiency (LEP). KFF. https://www.kff.org/racial-

    equity-and-health-policy/issue-brief/overview-of-health-coverage-and-care-for-

    individuals-with-limited-english-proficiency/#endnote_link_592615-5

Hale, S. B. (2007). *Community interpreting.* Palgrave Macmillan.

Hale, S., & Napier, J. (2013). *Research methods in interpreting: A practical resource*.

    Bloomsbury.

Hinton, K. G., Grim, V., & Howard-Hamilton, M. F. (2009). Our stories of mentoring and

      guidance in a higher education and student affairs program. In *Standing on the outside*

      looking in (pp. 184-202). Routledge.

Hlavac, J. (2015). Formalizing community interpreting standards: A cross-national comparison

      of testing systems, certification conventions and recent ISO guidelines. *International*

      Journal of Interpreter Education, *7*(2), 4.

Huber, B. J. (2010). Does participation in multiple high impact practices affect student success at

      Cal State Northridge?: Some preliminary insights. *California State University*

      Northridge, Office of Institutional Research.

International Medical Interpreters Association. (2024). *Mission Statement.*

      https://www.imiaweb.org/about-us/mission-statement/

International Organization for Migration. (2022). *World migration report.*

      https://worldmigrationreport.iom.int/wmr-2022-interactive/

International Organization for Standardization. (2024). *ISO 13611:2014 Interpreting—*

      Guidelines for community interpreting. https://www.iso.org/standard/54082.html

Inzer, L. D., & Crawford, C. B. (2005). A review of formal and informal mentoring: Processes,

      problems, and design. *Journal of leadership Education*, *4*(1), 31-50.

Jaccomard, H. (2018). Work placements in masters of translation: Five case studies from the

      University of Western Australia. *Meta*, *63*(2), 532-547.

Jacobi, M. (1991). Mentoring and undergraduate academic success: A literature review. *Review*

      of educational research, *61*(4), 505-532.

Katsarou, E., & Tsafos, V. (2013). Student-teachers as researchers: towards a professional

      development orientation in teacher education. Possibilities and limitations in the Greek

      university. *Educational Action Research*, *21*(4), 532-548.

Katschinka, L. (n.d.). The impact of Directive 2010/64/EU on the right to interpretation and

      translation in criminal proceedings. *EULITA*, 105-155.

Kendall, F. (2012). *Understanding white privilege: Creating pathways to authentic relationships*

      across race (2nd ed.). Routledge.

Kilgo, C. A., & Pascarella, E. T. (2016). Does independent research with a faculty member

      enhance four-year graduation and graduate/professional degree plans? Convergent results

      with different analytical methods. *Higher Education*, *71*, 575-592.

Kram, K. E. (1988). *Mentoring at work: Developmental relationships in organizational life*.

      University Press of America.

Krogstad, J. M., Passel, J. S., & Noe-Bustamante, L. (2022, September 23). *Key facts about U.S.*

      latinos for National Hispanic Heritage month. Pew Research Center. Retrieved April 15,

      2023, from https://www.pewresearch.org/fact-tank/2022/09/23/key-facts-about-u-s-

      latinos-for-national-hispanic-heritage-month/

Kuh, G. D. (2008). *High-impact educational practices: What they are, who has access to them,*

      and why they matter. Washington D.C.: Association of American Colleges and

      Universities.

Kur, E., DePorres, D., & Westrup, N. (2008). Teaching and learning action research:

      Transforming students, faculty and university in Mexico. *Action Research*, *6*(3), 327-349.

Kurz, I. (1985). The rock tombs of the princes of Elephantine: Earliest references to

      interpretation in Pharaonic Egypt. *Babel, 31*(4), 213-218.

Lawton, R. (2013). Speak English or Go Home: The Antiimmigrant Discourse of the American '*English Only*' Movement. *Critical Approaches to Discourse Analysis across Disciplines*. *7*(1), 100-122.

Logan, J. R., & Stults, B. J. (2021, August 12). *The persistence of segregation in the metropolis: New findings from the 2020 Census*. Diversity and Disparities Project. Brown University. https://s4.ad.brown.edu/Projects/Diversity/Data/Report/report08122021.pdf

Lopatto, D. (2003). The essential features of undergraduate research. *Council on Undergraduate Research Quarterly*, *24*(139-142).

Lozano Argüelles, C., & Martínez-Gómez, A. (2023, October). *Fitting the Program to the Learners: Adapting Translation Competence Models to Heritage Speakers*. *The Institute for Language Education in Transcultural Context, CUNY Graduate Center*. Online.

Marcinkus Murphy, W. (2012). Reverse mentoring at work: Fostering cross-generational learning and developing millennial leaders. *Human Resource Management*, *51*(4), 549-573.

Martínez-Gómez, A. (2008). Estudio comparativo de la práctica de la interpretación sanitaria en la provincia de Alicante. In *25 años de lingüística en España [Recurso electrónico]: hitos y retos= 25 years of applied linguistics in Spain: milestones and challenges* (pp. 1047-1052). Universidad de Murcia.

Martínez-Gómez, A. (2015). Non-professional interpreters. In H. Mikkelson & R. Jourdenais, *The Routledge handbook of interpreting*. (pp. 417-431). Routledge.

Martínez-Gómez, A. (2020). Language brokering experience among interpreting students: pedagogical implications for the development of interpreting competence, The Interpreter and Translator Trainer, 14:3, 303-321, DOI: 10.1080/1750399X.2020.1736436

Martínez-Gómez, A. (2024). Child language brokering: A look at the research. *Proteus: Quarterly Newletter of the National Association of Judiciary Interpreters and Translators. 36*(2), 3-6. https://files.constantcontact.com/bd6d489b001/b08eacd5-fe61-4430-8894-77930fdf0b5d.pdf?rdr=true

Martínez-Gómez. A., Showstack, R. E., Magaña, D., Dejbord-Sawan, P., & Hardin, K. J. (2021). Pursuing testimonial justice: Language access through patient-centered outcomes research with Spanish speakers. *Applied Linguistics*, *42*(6), 1110-1124.

Mehl R., Sierra L., & Perrichi A. (2021). *Introductory Language Justice Guide: A Resource for Emerging LJ Interpreters and Community.* Justice Language Program at the Hudson Valley Farm Hub.

Mellinger, C. D., & Gasca-Jiménez, L. (2019). Challenges and Opportunities for Heritage Language Learners in Interpreting Courses in the U.S. Context. *Revista Signos. Estudios de lingüística, 52*(101), 950-974.

Merriam, S. (1983). Mentors and protégés: A critical review of the literature. *Adult Education*, *33*(3), 161-173.

Merriam-Webster. (n.d.). Latina. In *Merriam-Webster.com dictionary.* Retrieved November 14, 2020, from https://ww w.merriam-webster.com/dictionary/Latina

Merriam-Webster. (n.d.). Latino. In *Merriam-Webster.com dictionary.* Retrieved November 14, 2020, from https:// www. merriamwebster.com/dictionary/Latino

Merriam-Webster. (n.d.). Latinx. In *Merriam-Webster.com dictionary.* Retrieved November 14, 2020, from https://www.merriam-webster.com/dictionary/Latinx

Mikkelson, H. (1996). The professionalization of community interpreting. *Global vision: Proceedings of the 37th annual conference of the American Translators Association*, 77-

89. https://www.researchgate.net/profile/Holly-

Mikkelson/publication/41446373_The_Professionalization_of_Community_Interpreting/l

inks/580cfd3008aeef1bfef4b420/The-Professionalization-of-Community-Interpreting.pdf

Mitra, S., & Dangwal, R. (2021). Evolution of the "hole-in-the-wall": a status review. Prospects:

Comparative Journal of Curriculum, Learning, and Assessment, 52(1-2), 209–222.

https://doi.org/10.1007/s11125-021-09552-y

Monzó-Nebot, E. & Wallace, M. (Eds.). (2020). Ethics of Non-Professional Translation and

Interpreting. [Special issue]. *Translation and Interpreting Studies 15*(1).

https://doi.org/10.1075/tis.15.1

Moore, K. E. (2020). *Cultivating confidence: Embodying self-esteem and self-efficacy in novice

signed language interpreters* [Master's thesis, Western Oregon University]. WOI

Campus Repository. https://wou.omeka.net/s/repository/media/4281

Moore, T., & Gayle, B. M. (2010). Student learning through co-curricular dedication: Viterbo

University boosts faculty/student research and community services. *Transformative

Dialogues: Teaching and Learning Journal*, *4*(1).

Mora, L. (2022, October 7). *Hispanic enrollment reaches New High at four-year colleges in the

U.S., but affordability remains an obstacle*. Pew Research Center.

https://www.pewresearch.org/short-reads/2022/10/07/hispanic-enrollment-reaches-new-

high-at-four-year-colleges-in-the-u-s-but-affordability-remains-an-

obstacle/#:~:text=Among%20Latinos%2C%20some%2035%25%20of,up%20from%201

4%25%20in%202010.

Nagda, B. A., Gregerman, S. R., Jonides, J., Von Hippel, W., & Lerner, J. S. (1998). Undergraduate student-faculty research partnerships affect student retention. *The Review of Higher Education*, *22*(1), 55-72.

Napier, J. (2021). Child language brokering in context. In *Sign language brokering in Deaf-hearing families*. (pp. 57-110). Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-030-67140-2_2

National Association of Judiciary Interpreters and Translators. (2016). *Advocacy..* https://najit.org/

National Council on Interpreting in Health Care. (2024). *NCIHC: Mission, goals, and values.* *https://www.ncihc.org/mission-goals-and-values*

National Council on Interpreting in Health Care. (2011). *National Standards for Healthcare Interpreter Training Programs.* https://www.ncihc.org/assets/documents/publications/National_Standards_5-09-11.pdf

National Survey of Student Engagement (2007), *Experiences that matter: Enhancing Student learning and Success—Annual Report 2007*, Indiana University Center for Postsecondary Research.

Navaza, B., Estévez, L., & Serrano, J. (2009). Saque la lengua, por favor: Panorama actual de la interpretación sanitaria en España. *Panace@*, *10*(30), 141-156. https://www.researchgate.net/profile/Barbara-Navaza/publication/41150845_Saque_la_lengua_por_favor_Panorama_actual_de_la_interpretacion_sanitaria_en_Espana/links/57feecfa08aeaf819a5c354e/Saque-la-lengua-por-favor-Panorama-actual-de-la-interpretacion-sanitaria-en-Espana.pdf

Newton, E., & Wells-Glover, L. (2000). Mentors for undergraduates in technical disciplines: A

    collaborative effort by faculty, student development professionals, and alumni to improve

    undergraduate retention and success in technical majors. *Journal of College Student*

    Retention: Research, Theory & Practice, *1*(4), 311-321.

Office for Civil Rights. (2021, August 10). *Civil Rights Requirements Title VI of the Civil Rights*

    Act. US Department of Health and Human Services. Retrieved June 2, 2023, from

    https://www.hhs.gov/civil-rights/for-individuals/special-topics/needy-families/civil-

    rights-

    requirements/index.html#:~:text=Title%20VI%20prohibits%20discrimination%20on,or%

    20other%20Federal%20financial%20assistance

Office of Civil Rights (OCR). (2016, August 25). *Section 1557: Ensuring meaningful access for*

    individuals with LEP. US Department of Health and Human Services. Retrieved June 10,

    2023, from https://www.hhs.gov/civil-rights/for-individuals/section-1557/fs-limited-

    english-proficiency/index.html

Olalla-Soler, C. (2019). Bridging the gap between translation and interpreting students and

    freelance professionals. The mentoring programme of the Professional Association of

    Translators and Interpreters of Catalonia. *The Interpreter and Translator Trainer*, *13*(1),

    64-85.

Olson-McBride, L., Hassemer, H., & Hoepner, J. (2016). Broadening participation: Engaging

    academically at-risk freshmen in undergraduate research. *Council on Undergraduate*

    Research Quarterly, *37*(1), 4-11.

Orellana, M. F. (2009). *Translating childhoods: Immigrant youth, language, and culture*.

    Rutgers University Press. https://doi.org/10.36019/9780813548630

Orozco-Jutorán, M. (2019). A mixed-methods approach in corpus-based interpreting studies: Quality of interpreting in criminal proceedings in Spain. *Research methods in legal translation and interpreting: Crossing methodological boundaries*, 152-169.

Orozco Jutorán, M., & Vargas-Urpí, M. (2022). Children and teenagers acting as language brokers: The perception of teachers at secondary schools. *Across languages and cultures*. *23*(1). 14-35.

Pain, R., Finn, M., Bouveng, R., & Ngobe, G. (2013). Productive tensions—engaging geography students in participatory action research with communities. *Journal of Geography in Higher Education*, *37*(1), 28-43.

Patel, V. (2017). Getting minority Ph. D. students to the finish line. *The Chronicle of Higher Education*, *63*(34), A7-A10.

Pérez Estéban, E. (2023). La voz de los pacientes alófonos: un estudio exploratorio de sus experiencias con intérpretes sanitarios en España. *FITISPos International Journal, 10*(1), 112-125. https://doi.org/10.37536/FITISPos-IJ.2023.10.1.349

Pérez-González, L. & Susam-Saraeva, S. (2012). Non-professionals translating and interpreting: Participatory and engaged perspectives. *The Translator*, *18*(2), 149-165.

Piller, I. (2016). *Linguistic diversity and social justice: An introduction to applied sociolinguistics*. Oxford University Press.

Pinzl, M. M. (2018). Mentoring at-risk students via developmental relationships and undergraduate research. *The Chronicle of Mentoring and Coaching*, *2*(1), 847-853.

Pinzl, M. M. (2022, June 15-17). *Exploring the Intersectionality of Personal Identities in Interpreting Education and Training: Empowering Interpreters toward Social Justice and Equity* [Conference Session], 1st International Conference on the Right to

Languages: Linguistic Policies and Translation and Interpreting in Public Services and Institutions, Valencia, Spain. https://blogs.uji.es/cidl/files/2022/07/BoA.pdf

Pinzl, M. M. (2023). Undergraduate Action Research as a high-impact mentorship practice in Community Interpreting Studies. *Hermēneus. Revista de Traducción e Interpretación*, (24), 445–481. https://doi.org/10.24197/her.24.2022.445-481

Pinzl, M. M. (2023). Professional and social impacts of Viterbo University's undergraduate community interpreting certificate program: Perceptions of recent graduates and community partners. *The Interpreter's Newletter*, *28*, 91–110. Doi: 10.13137/2421-714X/35552

Pinzl, M. M. (2024). Non-scripted role-playing with heritage speakers and second language learners in the medical interpreting classroom. *Translation and Translanguaging in Multilingual Contexts*, *10*(2), 206-235. https://doi.org/10.1075/ttmc.00134.pin

Pöchhacker, F. (2010). The role of research in interpreter education. *Translation and Interpreting* *2*(1), 1-10.

Pöchhacker, F. (2016). *Introducing interpreting studies* (2nd ed.). Routledge.

Pöllabauer, S. (2013). Community interpreting. *The encyclopedia of applied linguistics*, 1-7.

Potowski, K., & Lynch, A. (2014). Perspectivas sobre la enseñanza del español a los hablantes de herencia en los Estados Unidos. *Journal of Spanish Language Teaching*, *1*(2), 154-170.

Pym, A. (2024, April 19-20). *On the end of translation studies as we know it.* [Conference presentation] XII International Scientific Conference: Major Problems of Translation Studies and Translator/Interpreting Training. Online. https://doi.org/10/17613/gneb-qx84

Pujolà J. (Ed.). (2019). *El portafolio digital en la docencia universitaria*. Ediciones Octadedro.

Ragins, B. R., & Kram, K. E. (2007). *The handbook of mentoring at work: Theory, research, and practice*. Sage Publications.

Real Academia Española. (2020). *Informe de la Real Academia Española sobre el lenguaje incluive y cuestiones conexas*. https://bpb-us-w2.wpmucdn.com/sites.gsu.edu/dist/0/6796/files/2023/01/Informe_lenguaje_inclusivo-RAE.pdf

Roberts, R. P. (1997). Community interpreting today and tomorrow. In S. E. Carr, R. P. Roberts, A. Dufour & D. Steyn (Eds.) *The critical link: Interpreters in the community* (pp. 7-25). John Benjamins.

Roberts, R. P. (2002). Community interpreting: A profession in search of its identity. In E. Hung (Ed.) *Teaching Translation and Interpreting 4: Building Bridges*, (pp. 158-175). John Benjamins.

Rogers Drewek, A. H. (2023). *A Case Study of a Formal Mentorship Program: Uncovering an Ontological Framework for Supporting ASL-English Interpreters Along a Meaningful Path to Self-Efficacy*. (Publication No 30696594) [Doctoral dissertation, Gallaudet University]. ProQuest Dissertations Publishing. https://www.proquest.com/openview/8a0522de0fd4a76dd9156a68575d410a/1?pq-origsite=gscholar&cbl=18750&diss=y

Sacks, H., Schegloff, E. A., & Jefferson, G. (1974). A simplest systematics for the organization of turn-taking for conversation. *Language*, *50*(4), 696–735. https://doi.org/10.2307/412243

Sagor, R. (2010). *Collaborative action research for professional learning communities*. Solution Tree Press.

Saldanha, A. S. (2019). Mentoring in Translation: A Future Reality?. *The Chronicle of Mentoring and Coaching*, *3*(1), 439-442.

Santiago, D. & Soliz, M. (2012). Ensuring America's future by increasing Latino college completion: Latino college completion in 50 states. Executive Summary. *Excelencia in Education (NJ1).*

Sanz-Moreno, R. (2018). La percepción del personal sanitario sobre la interpatación en hospitales: Estudio de caso. *Panace@ XIX*(47)*, 67-75.

Sarafini, E. (2023, April 13-15). *Con y no para: The self as a site of social justice work in (heritage) language education*. [Conference presentation abstract]. 10th National Symposium on Spanish as a Heritage Language. Cambridge; MA, United States. https://scholar.harvard.edu/sites/scholar.harvard.edu/files/10nsshl2023/files/10thnsshl_ab stracts_updated_1.pdf

Sawyer, D. (2004). *The Fundamental Aspects of Interpreter Education*. John Benjamins Publishing Company.

Shrider, E. A., Kollar, M., Chen, F., & Semega, J. (2021, September 14). *Income and poverty in the United States: 2020*. Retrieved May 22, 2023 from https://www.census.gov/library/publications/2021/demo/p60-273.html

Standardized patient program. What is a Standardized Patient? Perelman School of Medicine at the University of Pennsylvania. (n.d.). Retrieved December 28, 2022. https://www.med.upenn.edu/spprogram/what-is-a-standardized-patient.html

University of Oregon. (n.d.). *What is cultural humility?: The basics*. Division of Equity and Inclusion. https://inclusion.uoregon.edu/what-cultural-humility-basics

USAGov. (2023, December 27). *Official language of the United States*.

    https://www.usa.gov/official-language-of-us

U.S. Bureau of Labor Statistics. (2022, September 8). *Interpreters and translators: Occupational*

    outlook handbook. U.S. Bureau of Labor Statistics. Retrieved April 26, 2023, from

    https://www.bls.gov/ooh/media-and-communication/interpreters-and-

    translators.htm#:~:text=%2445%2C760-

    ,The%20median%20annual%20wage%20for%20interpreters%20and%20translators%20

    was%20%2449%2C110,percent%20earned%20more%20than%20%2497%2C760

U.S. Bureau of Labor Statistics. (2023, September 6). *Interpreters and translators :*

    Occupational outlook handbook. U.S. Bureau of Labor Statistics. Retrieved March 30,

    2024, from https://www.bls.gov/ooh/media-and-communication/interpreters-and-

    translators.htm

U.S. Census Bureau. (2021a). *Census Reporter Profile Page for La Crosse County*. [American

    Community Survey 1-year estimates]. Retrieved May 18, 2023, from

    https://censusreporter.org/profiles/05000US55063-la-crosse-county-wi/

U.S. Census Bureau. (2021b, December 16). *Census Bureau reports at least 350 languages*

    spoken in U.S. homes. Retrieved May 18, 2023 from

    https://www.census.gov/newsroom/archives/2015-pr/cb15-185.html

U.S. Census Bureau. (2021c, December 16). *Frequently asked questions (faqs) about language*

    use. Retrieved April 17, 2023, from https://www.census.gov/topics/population/language-

    use/about/faqs.html

U.S. Census Bureau. (2022a). *About the Hispanic population and its origin*. U.S. Office of

    Management and Budget. Retrieved April 14, 2024, from

    https://www.census.gov/topics/population/hispanic-origin/about.html

U.S. Census Bureau. (2022b). *Quickfacts: La Crosse County, Wisconsin*. Retrieved May 18,

    2023, from https://www.census.gov/quickfacts/lacrossecountywisconsin

U.S. Citizenship and Immigration Services. (2024, April 8) *Consideration of deferred action for*

    childhood arrivals (DACA). U.S. Citizenship and Immigration Services. Retrieved May

    25, 2024, from https://www.uscis.gov/DACA

U.S. Department of Justice. (2024). *Civil Rights: Limited English Proficient.* Retrieved May 25,

    2024 from https://www.ojp.gov/program/civil-rights/limited-english-proficient-

    lep#:~:text=Courts%20have%20interpreted%20Title%20VI's,to%20their%20programs%

    20and%20services

U.S. Department of Education. (2020). *Developing ell programs: Lau V. Nichols*. Office for

    Civil Rights. Retrieved September 3, 2024 from

    https://www2.ed.gov/about/offices/list/ocr/ell/lau.html

U.S. Department of Justice Civil Rights Division. (n.d.). *The Americans with disabilities act*.

    ADA.gov. https://www.ada.gov/

U.S. Office of Civil Rights. (2016). *Section 1557: Ensuring meaningful access for individual*

    swith LEP. Retrieved May 25, 2024 from https://www.hhs.gov/civil-rights/for-

    individuals/section-1557/fs-limited-english-proficiency/index.html

Valdés, G. (2000). *American Association of Teachers of Spanish and Portuguese. Volume I.*

    Spanish for Native Speakers: AATSP Professional Development Series Handbook for

    Teachers K-16. Harcourt College Publishers.

Valdés, G. (2003). *Expanding definitions of giftedness: The case of young interpreters from immigrant communities.* (Ser. Educational Psychology Series). Lawrence Erlbaum Associates.

Valdez, R. (Director). (2023). *Translators* [Film]. 9A Films, Inc. Retrieved December 31, 2023, from https://translatorsfilm.com/

Varga, L. K. (2024, February 29). *The 2024 nimdzi 100 preliminary ranking*. Nimdzi. https://www.nimdzi.com/the-2024-nimdzi-100-preliminary-ranking/#:~:text=State%20of%20the%20language%20industry,tells%20a%20more%20nuanced%20story

Vargas-Urpí, M. (2012). State of the art in community interpreting research: mapping the main research topics. *Babel, 58*(1), 50-72. DOI 10.1075/babel.58.1.04var

Vargas-Urpí, M., & Romero Moreno, A. (2022). *El fenomen de la intermediació lingüística per part de menors (ILM).* MIRAS (Mediació i Interpreció: Recerca en l'Àmbit Social), Universitat Autònoma de Barcelona. https://ddd.uab.cat/record/259030

Vargas-Urpí, M., Romero Moreno, A., Arumí, M., Bestué, C., Gil-Bardají, A., Orozco Jutorán, M., Raigal Aran, J., & Rubio Carbonero, G. (2021). *La intermediació lingüística per part de menors a l'àmbit educatiu.* MIRAS (Mediació i Interpreció: Recerca en l'Àmbit Social), Universitat Autònoma de Barcelona. https://ddd.uab.cat/record/240242

Vargas-Urpí, M., Romero-Moreno, A., Arumí, M., Bestué, C., Gil-Bardají, A., Orozco-Jutorán, M., Raigal, J., & Rubio Carbonero, G. (2022). *La intermediació lingüística per part de menors a l'àmbit social.* MIRAS (Mediació i Interpreció: Recerca en l'Àmbit Social), Universitat Autònoma de Barcelona. https://ddd.uab.cat/record/258307

Verd, J. M. & López-Roldán, P. (2008). La eficiencia teórica y metodológica de los diseños

      mulimétodo. *Empiria: Revista de metodología de ciencias sociales*, (16), 13-42.

Wadensjö, C. (1998). *Interpreting as Interaction* (1st ed.). Routledge.

      https://doi.org10.4324/9781315842318

Wadensjö, C. (2011). Interpreting in theory and practice: Reflections about an alleged gap. In C.

      Alvstad A. Hild & E. Tiselius (Eds.) *Methods and strategies of process research* (pp. 13-

      21), John Benjamins.

Wallace, M., Pinzl, M., & Martínez-Gómez, A. (2022, June 22-25). *Non-professional*

      interpreting and translation: Advancement and subversion. [Conference panel]. 10th EST

      Congress, Oslo. https://www.hf.uio.no/ilos/english/research/news-and-

      events/events/conferences/2022/est22/program/#Program%20and%20schedule

Williams, J., & Schwiebert, V. L. (2000). Multicultural aspects of the mentoring process. In in V.

      L. Schwiebert (Ed.), *Mentoring: Creating connected, empowered relationships* (pp. 57-

      70). American Counseling Association.

Wisconsin Department of Public Instruction. *Early college credit program*. (2024).

      https://dpi.wi.gov/dual-enrollment/eccp

Witter-Merithew, A., Johnson, L., Bonni, B., Naiman, R., & Taylor, M. (2002). Deaf Language

      Mentors: A model of mentorship via distance delivery. In L. Swabey (Ed.), *Proceedings*

      of the 14th National Convention: Conference of Interpreter Trainers: New Designs in

      Interpreter Education.

World Bank. (2023, April 6). *Indigenous peoples*.

      https://www.worldbank.org/en/topic/indigenouspeoples#:~:text=They%20speak%20more

      %20than%204%2C000,476%20million%20Indigenous%20Peoples%20worldwide

World Health Organization. (2010). *Framework for Action on Interprofessional Education & Collaborative Practice.* Health Professional Networks Nursing and Midwifery Human Resources for Health. https://apps.who.int/iris/bitstream/handle/10665/70185/WHO_HRH_HPN_10.3_eng.pdf?sequence=1

World Health Organization. (2023, February 27). *Deafness and hearing loss*. Retrieved o June 24 from https://www.who.int/news-room/fact-sheets/detail/deafness-and-hearing-loss

Zellers, D. F., Howard, V. M., & Barcic, M. A. (2008). Faculty mentoring programs: Reenvisioning rather than reinventing the wheel. *Review of educational research*, *78*(3), 552-588.

Zong, J., & Batalova, J. (2022, June 27). *The limited English proficient population in the United States in 2013*. migrationpolicy.org. Retrieved April 21, 2023, from https://www.migrationpolicy.org/article/limited-english-proficient-population-united-states-2013

Appendices

Appendix A: Graduates Perceptions on Viterbo University's Community Interpreting Certificate

Double click on the icon below to see the raw data collected from surveys distributed to Community Interpreting Certificate Graduates.

VU_CIC_Prcptns_G
rads_11_12_2022.xl
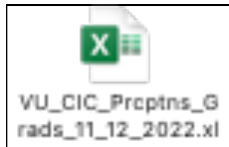
Appendix B: Community Partner Perceptions on Viterbo University's Community Interpreting Certificate

Double click on the icon below to see the raw data collected from surveys distributed to community partners that work closely with Viterbo's Community Interpreting Certificate.

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Prcptns_11_28_20