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## Positioning SLP Graduate Students to Meet the Needs of Vulnerable Children Virtually: Lessons from a Service Learning Project Implemented in the Fall of 2020

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## Positioning SLP Graduate Students to Meet the Needs of Vulnerable Children Virtually: Lessons from a Service Learning Project Implemented in the Fall of 2020

### Cover Page Footnote

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Service-learning enhances students' learning of course content through participation in service projects that meet a community's needs. Service-learning is a form of experiential education, alongside volunteerism, student teaching, co-op education, and internship/practicum, each of which has a unique combination of characteristics (Goldberg et al., 2006). According to Furco (1996):

Service-learning programs are distinguished from other approaches to experiential education by their intention to equally benefit the provider and the recipient of the service as well as to ensure equal focus on both the service being provided and the learning that is occurring. (p. 12)

Service-learning can be traditional (i.e., in-person service-learning) or incorporated into an online format with no physical face-to-face interaction with the community partner, which Waldner et al. (2010) described as "extreme e-service-learning" (p. 839).

Within speech-language pathology (SLP) graduate programs, service-learning represents a shift from traditional clinical experiences completed apart from didactic coursework (Bailey & Angell, 2005). There have been a wide variety of applications in both SLP graduate and undergraduate classes and students have worked with a wide range of populations in these projects (e.g., Allman, 2013; Kim & Garcia, 2019; Kleinhans & Hart, 2012; Mahendra et al., 2013). These research studies on service-learning have examined different sources of data to assess the impact of service-learning assignments on student learning, including surveys, interviews, quantitative rating scales, student reflection papers, and both formal and informal course evaluations. For example, Kim and Garcia (2019) described an in-person immersive aphasia camp in which 10 pre-professional SLPs actively participated in client-centered care. Interviews were conducted to determine the level of student learning and application of knowledge. The interviews revealed that students gained insight into people with aphasia beyond their disability, developed empathy, and improved their supported communication skills. Mahendra et al. (2013) described a service-learning project where 45 SLP graduate students volunteered in a nursing home to work with patients with dementia. Data from reflection papers and course evaluations showed that students improved their knowledge of dementia, developed assessment skills, learned to modify their communication, and maintained positive attitudes such as excitement and compassion through this project.

Many documented SLP service-learning projects involve providing service to school-age children. In order to ensure learning occurs, instructors must provide structured opportunities for students to reflect critically on the services they are providing (Goldberg et al., 2006). Bailey and Angell (2005) discussed a service-learning project in which 34 SLP graduate students implemented a feeding improvement program serving elementary and junior high students with disabilities at two local schools. Surveys about the experience indicated that the graduate students, school staff, and parents had mostly positive comments about the experience of both the graduate students' learning and school students' improvement. Kleinhans and Hart (2012) described in-person summer programming for families of children with Down syndrome. A Likert scale survey and open-ended questions given to the participating graduate students showed that they enjoyed the support from their peers and supervisors, saw the opportunity for reflection about their experience as valuable, and felt that the experience was more fun and exciting than a traditional clinical experience. The parents also rated the experience and indicated significant gratitude. Allman (2013) wrote about an undergraduate communication sciences and disorders service-learning project involving in-person literacy tutoring as part of an after-school program. Students completed pre- and post-

program questionnaires that asked about attitudes towards the project, as well as a final survey with reflective questions. Results showed that the experience made SLP students feel more positive about and interested in being active in the community. In summary, service-learning assignments and programs within speech-language pathology positively impact students' learning experiences.

**Current Study.** This study investigated the impact of a service-learning assignment included in an SLP graduate-level class focused on school-age children. This course took place in the fall of 2020 in the northeastern part of the United States. This assignment was designed with two interrelated goals in mind: for the graduate students to authentically contribute to meet the overwhelming needs of school-age children during the COVID-19 pandemic and to enhance the course content by promoting student engagement.

In this study, SLP graduate students partnered with a community organization to provide tutoring services to kindergarten (K)-12 students at-risk for school failure. This study was unique because it was implemented at a time when both higher education and K-12 education were experiencing unprecedented challenges related to the COVID-19 pandemic. The start of the 2020-2021 school year was unlike previous new school years. In the fall of 2020, only 49% of U.S. school districts provided fully in-person instruction while 38% of K-12 students continued to learn remotely (either fully remote or in a hybrid model; Gross et al., 2020). Many university courses were also taught entirely online for the first time in fall 2020 (Broady et al., 2021).

These challenges in K-12 education highlighted the importance of new SLPs being fully prepared to support the unique needs of school-age children. Numerous research groups predicted that changes in instruction related to the pandemic would negatively impact student learning across the board (Kuhfeld & Tarasawa, 2020). Many also predicted that children from the most vulnerable populations of students (e.g., students with disabilities, English language learners, K-12 students from historically disadvantaged racial and cultural backgrounds) would be the most negatively impacted (e.g., Hoffman, 2020; Levine, 2020; Strauss, 2020). Given this, it seemed particularly urgent for new educational professionals to be prepared to meet the evolving challenges faced by K-12 students so they could focus on ameliorating the learning loss likely to be exacerbated by the COVID-19 pandemic.

## Method

**Participants.** Participants in this study consisted of 12 graduate students enrolled in the course, Language Disorders in School-Age Children in a Communication Sciences and Disorders master's program located in the Northeast region of the United States in the fall of 2020. These 12 students represented the total number of students enrolled in the course. All of the students had completed three semesters as graduate clinicians in the on-campus university speech and language clinic, having gained approximately 100 hours of clinical experience (inclusive of 25 observation hours). This was the final semester before they would complete their off-campus clinical rotations. This study was approved by the Institutional Review Board (IRB) at the university affiliated with the author. Since this study involved implementing teaching activities and assignments typical for this course and did not collect identifiable data from students, including demographic information, this study was considered exempt based on the IRB review.

**Procedures.** Participants completed the assignment under investigation as part of a required graduate-level course focused on preparing students studying speech-language pathology to work

in public schools. The course included a variety of assignments on assessment and intervention strategies for school-age children with disabilities. See Table 1 for a list of the main topics covered in this class week by week.

**Table 1**

*Topics Covered in the Class*

Week of class	Focus area
1 - 2	Understanding the context of public schools: general education (e.g., Common Core State Standards, Every Student Succeeds Act), special education (e.g., Individuals with Disabilities Education Act)
3	Decision making with school-age children (standardized and nonstandardized assessment, multi-tiered systems of support)
4	Interventions focused on speaking and listening (e.g., note taking, narratives)
5	Interventions focused on reading foundational skills (e.g., decoding, phonological awareness)
6	Interventions focused on reading comprehension (e.g., reading strategies, close reading)
7	Interventions focused on writing (e.g., syntax, writing organization)
8	Interventions focused on language (e.g., vocabulary, morphology)
9	Social-emotional focused interventions (e.g., positive behavior interventions and support)
10-11	Planning, developing, and implementing Individualized Education Plans
12	Working with culturally and linguistically diverse populations
13	Role of technology in service delivery
14	SLPs and advocacy, leadership, and creativity in school settings
15	Special populations and comorbid conditions

Aligned with best practices in service-learning, the service-learning assignment under investigation was developed via ongoing discussions with a community organization located in the same town as the graduate program about how to support their mission. Veyvoda and Van Cleave (2020) explain that service-learning is a reciprocal partnership between communities and colleges and that faculty should work closely with community partners to understand their needs.

This project involved partnering with a local non-profit organization with the stated mission of helping public school students at risk for school failure. This organization provides free tutoring services to K-12, primarily minority students, whose families have low and moderate incomes. The tutoring involves one-on-one instruction in language arts, math, science, and social studies. The organization was in the ongoing process of transitioning all its tutoring sessions (which typically take place in-person at public libraries) into a virtual environment. Based on three conversations throughout the summer of 2020, it was determined that the best use of graduate students' expertise would be to supplement the current tutoring program.

The service-learning assignment involved 12 graduate students tutoring K-12 children for 10 weeks. Each tutoring session lasted for one hour and typically involved helping the student with homework. Graduate students were not expected to prepare for these sessions and were instructed to respond in a flexible manner to the needs of the students. See Table 2 for the description of the assignment purposes and expectations provided to students when the assignment was introduced. A major component of this assignment was the final reflection paper. Reflection is recognized as an important element of the service-learning pedagogy (Furco, 1996).

**Data Sources.** The analysis focused on student reflection papers, which were a required element of the assignment. The prompts for these reflection papers are included in Table 2.

The suggested length was 2-3 double-spaced pages. The total number of words per piece ranged from 546 to 1,148, and the average number of words was 856. The papers were analyzed for research purposes after the course grading was completed.

**Data Analysis.** All reflection papers ( $n = 12$ ) were de-identified before data analysis began. Two graduate students, both trained by the author of this paper on the basics of qualitative analysis, assisted the author with data analysis. The author of this paper is a trained and established academic researcher with extensive experience and training related to qualitative analysis. One graduate student worked as a graduate assistant to support the author with her research and the other graduate student acted in a volunteer capacity. The first student was not enrolled in this course, and the second student was enrolled in this course. This mix of perspectives on the research team was intentional to ensure that perspectives of people familiar and unfamiliar with the course content were captured. In a manner consistent with qualitative research methodology (Bogdan & Biklen, 1998), each stage of analysis was completed as a collaborative and iterative process.

Each research team member read all the reflection papers two times to “achieve immersion and obtain a sense of the whole as one would read a novel” (Hsieh & Shannon, 2005, p. 1279). After this, the research team met as a group several times to discuss common threads or themes across the reflection papers. Content analysis is a method for analyzing and identifying meaning within text data, where the focus is identifying specific content related to key themes (Cavanagh, 1997; Strauss & Corbin, 1998). The idea of content analysis is to find meaning from large amounts of text by identifying “an efficient number of categories that represent similar meanings” (Hsieh & Shannon, 2005, p. 1278). In this study, all overarching themes, as well as related subthemes, were identified using a combination of inductive analysis and researcher reflectivity (Maxwell, 2005; Bowen, 2020). As explained by Morse and Field (1995), “the theme may be beneath the surface ... but, once identified, appear obvious” (pp. 139-140).

**Table 2***Information Provided to Students*

Assignment element	Details
Description of assignment	While school-based SLPs have a unique role and training, they are part of the school community and work with a team of educators to help school-age students make academic progress and be successful in school. In order to help reflect on the specific mission of school-based SLPs and also to contribute to education in a meaningful way during this unprecedented moment in time, we will be partnering with a local community organization that provides free tutoring to students at risk for school failure this semester.
Stated goals	<p>The goals of this assignment are:</p> <ul style="list-style-type: none"> <li>● To understand typical school-age language development on a deeper level by getting a “real world” view of the public school curriculum and the academic demands placed on school-age students</li> <li>● To reflect on the unique mission and focus of school-based SLPs, especially in culturally and linguistically diverse settings</li> <li>● To contribute meaningfully to the local community during this challenging moment in time</li> </ul>
Prompts for final reflection paper	<p>What did you learn and gain from this volunteer experience? How did it deepen or further your understanding of the topics and ideas explored in this course?</p> <p>How did this experience impact your thoughts about the differences and similarities between the responsibilities of tutors, teachers, and SLPs?</p> <p>Did this experience alter or extend your thinking about the roles SLPs can play in supporting students at-risk for school failure or supporting vulnerable populations?</p>

After the themes and subthemes were identified, the reflection papers were read again by each member of the research team in order to identify (i.e., code) sentences within each reflection paper that exemplified the themes and subthemes using a coding qualitative research software (Taguette, Version 0.10.1; Rampin et al., 2021). The research team met frequently to discuss the coding and resolve any inconsistencies in interpretation. Given the iterative and flexible nature of the code discussions, an inter-rater reliability rate was not determined, but efforts to ensure trustworthiness

were taken (Lincoln & Guba, 1985). For example, each team member read the reflection papers numerous times, and the research team engaged in several reflective discussions regarding the biases of each member. After each reflection paper was analyzed and the coding process was completed, the research team created a file containing all quotes from student reflection papers related to each theme and subtheme so that these quotes could be considered as a group (Seidman, 2006). Examples of these quotes from reflection papers are included in the discussion of the results below.

## Results

Student reflection papers were analyzed, and three overarching themes were identified, including (a) the novel contextual factors of the assignment, (b) the specific learning related to course content, and (c) students feeling more prepared to enter the field of speech-language pathology. Each of these broader themes also has associated subthemes, as seen in Table 3.

**Table 3**

### *Main Themes and Associated Subthemes*

Main themes	Associated subthemes
Novel contextual factors of assignment	Virtual interactions and the impact of the pandemic Acting as a tutor rather than a student SLP clinician
Specific learning related to course content	Intervention areas Educational policies and frameworks SLP role delineation in school settings
Students felt more prepared to enter the field	Novel experiences New perspectives

### **Novel Contextual Factors of Assignment**

***Virtual Interactions and the Impact of the Pandemic.*** The fact that both the service and learning components of this class were virtual for graduate students was an important context of this assignment. The K-12 children they were tutoring were attending schools in a virtual environment (i.e., Zoom) as a public health safety measure. The reliance on virtual connections due to a pandemic stood out to students in their reflection papers. As they described the context of the service and learning, they expressed an appreciation for the opportunity to learn and support the community, even under these challenging circumstances. As one student explained, “Due to the global pandemic, we had a unique opportunity to (virtually) be in the homes of the children we worked with.” Another reflected on how this context prompted her to appreciate the learning experience by stating:

I would like to take the opportunity to thank [the instructor], for incorporating this [partner organization] experience into our course this semester. It showed that even in the midst of life's current craziness and uncertainty, we can all find it in ourselves to give back even for just one hour a week.

While students' reflection papers generally did not mention their personal level of stress completing graduate-level classes in a virtual environment, many student reflection papers discussed the challenges of virtual learning experienced by the K-12 students they supported. They reflected on how their experiences with the service-learning assignment gave them novel insight into these challenges. For example, one graduate student explained that their K-12 student had "slow internet connection, frozen screens, and lags." Another graduate student told a story about the child she was tutoring that illustrated her awareness of the challenges children faced learning from home: "In one session, she was holding her baby sister, which was obviously distracting. . . I kindly asked if it was OK for her to put her baby sister down and show her sister how good a student she is." In their reflection papers, graduate students reflected on the atypical challenges K-12 students faced at this moment in time during the COVID-19 pandemic. One wrote about how their K-12 student "had lots of distractions at home . . . which sometimes had an impact on how she performed during our sessions. I could see how this can have an influence on her virtual learning during school as well." Another student stated, "I feel that this experience really deepened my understanding of the achievement gap and the idea of the digital divide."

***Acting as a Tutor Rather Than a Student SLP Clinician.*** Acting in the capacity of a tutor versus a student clinician was another novel context of this service-learning assignment that provided students with a new perspective. One student explained how, in her role as a tutor, "I was able to truly see how language skills/difficulties impact every aspect of a child's education. . . . Reading difficulties with decoding and fluency impact his performance and understanding of different subjects like science, social studies, and math." Another explained:

The role of a tutor is different from that of a teacher or SLP. This was a much less structured role, in my experience. . . . My student sometimes came with his own homework or study materials that I was seeing for the first time in that session, so it involved a lot more flexibility.

Given that this was a tutoring experience, students experienced other issues that were different from their role as student clinicians. For example, the students lacked background knowledge on the children they tutored and were not required to take extensive data to document student progress. One student stated, "A big difference between being a tutor and an SLP is that there is no data collection required for tutoring. . . . It was nice not to record data and have my full attention on my student." With respect to background knowledge on children, one student explained, "Unfortunately, we did not have more background knowledge on our students, so it is difficult to look further into where the difficulties originate from."

***Specific Learning Related to Course Content.*** Analysis of the reflection papers identified that students felt the assignment deepened their understanding of various course topics. In the words of one student:

Being a part of this volunteer experience allowed me to apply the material I read and discussed on discussion boards and during class to a real-life situation. While [this course]

afforded me a wealth of knowledge and presented me with concepts and ideas that can be placed in my professional toolbox for future clients, my volunteer experience with [community organization] was the bridge between that great information we read about and the application of those promising strategies we discussed.

In their reflection papers, students provided insight into how this assignment related to the course content with responses that were categorized into three subthemes related to the topics covered in the course, including (a) intervention areas, (b) educational policies and frameworks, and (c) the SLP role delineation in school settings.

***Intervention Areas.*** In their reflection papers, students described how the service-learning project provided an authentic context to apply course content regarding the intervention areas covered in class (e.g., literacy, writing). As one student explained, “I was still able to implement a lot of techniques and strategies learned throughout this semester to my sessions with my student. Topics we focused on included reading comprehension, writing skills, expanding her vocabulary, and even math and science”. Another stated, “I had the opportunity to practice skills discussed in this class related to healthy study habits, vocabulary, writing, and reading.” Some students commented on the value of being able to apply these intervention approaches to a school-age child, stating, “After learning about specific interventions, strategies, and ways to support school-age students on their reading comprehension skills, it was very helpful to be able to immediately apply this new knowledge to a real-world situation.” Students also reflected on how they could support language skills while simultaneously supporting other areas of academics, with one commenting, “I was able to teach phonemic awareness and literacy skills not only while studying for vocabulary tests in English class, but also in math and science classes.”

***Educational Policies and Frameworks.*** Beyond intervention areas, the course also covered aspects of educational policy, such as Common Core State Standards (CCSS) and the multi-tiered systems of support (MTSS) framework. Students described and mentioned these concepts in their reflection papers. With respect to the CCSS, one student explained, “As J is currently in first grade, he is expected to demonstrate the following skills according to CCSS: phonological awareness and knowledge and application of grade-level phonics/word analysis skills in decoding words.” This statement showed an awareness of how to use the CCSS to gauge student progress. Another reflected on their understanding of the CCSS and how these standards should influence their work with students by stating, “This course and this tutoring experience confirmed that we have a duty to support our colleagues and teachers in achieving the CCSS for every student at every grade level.” With respect to the MTSS framework, one student pointed out:

We discussed this entire semester how the MTSS framework is imperative to target support to struggling students and intervene as early as possible. . . . It is so important to try and implement this model because so many students, like my [community organization] student, may not necessarily need additional speech and language services, but still benefit so much from extra support in the classroom and in tutoring sessions.

Another stated:

The MTSS framework suggests that there are levels of support that can be offered to students based on their specific needs. Although not all students qualify for individualized

services, they can immensely benefit from reinforcement so that they do not fall behind academically. I witnessed this first-hand with my student.

***SLP Role Delineation in School Settings.*** Students also gained an understanding of the specific roles and responsibilities of SLPs and the dynamics of how that role fits in with the rest of the school community. A key focus of the course was understanding the role of school-based SLPs and how this role is delineated from other professionals'. One student pointed out, "It is perhaps the differences between tutors, teachers, and speech-language pathologists that highlight why the collaborative efforts among these three figures can best support students." With respect to the role of SLPs in schools and how this contrasts with other educators, one student reflected:

Teachers educate students according to grade level/common-core standards, SLPs incorporate modifications and accommodations for students who need additional support to meet those standards, and tutors can provide additional assistance outside of school hours to complete given tasks or strengthen concepts. Although the exact responsibilities of each role differs, the goal is the same.

Within this idea of delineating the SLP role, students also discussed the importance of SLPs collaborating with other educators and the multiple roles SLPs play in school settings. Regarding how SLPs should collaborate with other educators, some students wrote about the responsibilities of all educators working together, such as the student who said, "Although SLPs wear 'many hats,' we cannot wear them all. Students are going to benefit the most from their academic team all working in an interdisciplinary manner." Others gained a better understanding of the SLP's role as a consultant and in providing professional development, including the student who said, in respect to specific techniques they used in tutoring, "These supports may not be things that general education teachers or tutors think of, so it is important for SLPs to be a resource to these individuals and provide them with information on how to effectively assist their students."

**Students Felt More Prepared to Enter the Field.** Graduate students wrote that they felt more prepared to enter the field as a result of this assignment. The overarching theme of "students felt more prepared to enter the field" has two underlying subthemes: (a) novel experiences, and (b) new perspectives that graduate students gained from their service-learning experiences.

***Novel Experiences.*** Data suggested this assignment allowed students to feel better prepared to enter the field of speech-language pathology because the novel experiences that were part of this assignment added value beyond their previous clinical training. One student said, "I found my Monday tutoring to be one of the most fulfilling hours of my week, and it is with great hope that my student looked forward to our sessions too." Another reflected, "I am a more well-rounded SLP through this experience and ready for the next chapter in my nascent career." Some students spoke about how their experience prepared them to be school-based SLPs, with one explaining their tutoring allowed them to picture "what my role as an SLP would be like in direct relationship to the school-aged child" and another sharing "I feel better equipped to enter a school district someday both ready and willing to offer my services and support wherever possible."

Graduate students also explained that the population of students they tutored varied from the students they worked with in the clinic, with one stating, "My education thus far has lacked coursework concerning providing services to students from diverse cultural and linguistic backgrounds. This volunteer opportunity has helped bridge that gap in my education." Another

pointed out that this assignment afforded them the new experience of supporting children from underserved communities during a unique time, explaining how tutoring has “helped me gain ‘real world’ experience working with a student from an urban community. . . I learned about the challenges in trying to help these students ‘catch up’ and meet common core standards, all while dealing with a global pandemic.”

***New Perspectives.*** This experience helped students prepare for their careers by providing them new perspectives. The experience also helped them make connections with their prior life experiences and their current values. For example, one student explained, “The experience reminded me of a personal passion I have always held near and dear-but have forgotten during my graduate student years: volunteering.” One student shared, “Overall, I’m grateful for this experience to have opened my eyes to the realities facing students. I also learned how broad and limited my scope is, all at the same time. Language infiltrates every subject.”

Some students wrote about how the service-learning project inspired their interest in supporting underserved communities. For example, one student stated, “This experience extended my thinking about the roles SLPs can play in supporting students at-risk for school failure or supporting vulnerable populations.” Another stated, “All of this further deepened my understanding of the importance of being a positive force in the lives of the children we work with, especially children of color who live in underserved communities.” Overall, students gained valuable new perspectives from this experience. This notion is well-summarized by the words of one student who explained, “When we are dedicated, open-minded, and empathetic towards clients and their families with backgrounds that might be foreign to ours, we are living up to our ethical duties and expectations as a professional.”

## **Discussion**

This paper investigated the impact of a service-learning assignment in a speech-language pathology graduate class. This study found that the unique context of the assignment led to learning related to course content which, in turn, led to students feeling more prepared for the field. The impact of the assignment also underscores the potential of the service-learning pedagogy to benefit both SLP graduate students and the communities they serve. This example of a successful service-learning project, embedded in a graduate class during a challenging time, provides useful data about additional coursework designed to prepare students to meet the needs of the moment.

The most novel aspect of the context of this assignment was the reliance on virtual interactions as a result of the pandemic. Though this is not the only time a virtual service-learning assignment has been implemented and documented, the fall semester of 2020 was a unique context with respect to virtual learning. It was the first semester, both within the higher education and K-12 educational spheres, where physical interactions had to be curtailed from the first day of the academic year due to the COVID-19 pandemic. This context impacted both graduate students and K-12 children with a variety of new stresses and worries. Within this context, the instructor was concerned both about the engagement of graduate students within the online course as well as preparing them to address the unique challenges of K-12 students as a result of the pandemic.

One of the major challenges in designing and implementing online coursework from an instructor’s perspective is creating experiences that help students feel more connected and designing assignments that are both engaging and motivating (Theodosiou & Corbin, 2020). This is

especially pivotal during a pandemic, when students may be experiencing feelings of isolation and lack of community that extend even beyond the typical challenges of online learning (Akyıldız, 2020). The data presented in this paper suggest that service-learning may be a way to engage students in a meaningful way under such circumstances. In fact, many student reflection papers mentioned this assignment kept them engaged and motivated through an unprecedented semester. This finding is meaningful because there is relatively little data about the impact of service-learning pedagogy in online courses. While there is some preliminary information about the adjustment of pre-planned service-learning projects to an online format during the pandemic (e.g., virtual fundraising, managing social media, developing programming like Zoom trivia; Veyvoda & Van Cleave, 2020), recent studies suggest the pace of implementing service-learning in online courses has not kept up with the overall growth of online learning (Stefaniak, 2020). Given this, there are relatively few examples of service-learning projects where both the “service” and the “learning” component of the course are purposely designed to be completely virtual (i.e., “extreme e-service-learning”; Waldner et al., 2010, p. 839). The assignment described in this paper has the potential to serve as a model for other institutions seeking to establish virtual service-learning opportunities, particularly within the field of speech-language pathology. Although there is hope that the pandemic will soon cease to play such a large role in influencing educational context, it may be that for “the foreseeable future, serving the community from a physical distance may be the only approach that both the academic institution and community partner are comfortable with” (Veyvoda & Van Cleave, 2020, p. 1545).

The assignment described in this study was also distinct from previous research on service-learning in speech-language pathology because the graduate students acted in a capacity other than SLP student clinicians. This is unique because most, but not all, service-learning assignments involving SLP graduate students have students functioning as student clinicians (e.g., Allman, 2013; Bailey & Angell, 2005; Kim & Garcia, 2019; Kleinhans & Hart, 2012; Mahendra et al., 2013). This deliberate shift in role seemed to provide a new perspective on K-12 children and provided an authentic context to apply course content. This finding is critical because there is research suggesting that SLPs in educational settings may face challenges defining their role in relation to other educators, and confusion in role delineation may translate into difficulties determining their role with respect to education frameworks like the CCSS and MTSS (Blosser et al., 2012; Power-deFur, 2016; Ukrainetz & Fresquez, 2003). For example, Ukrainetz (2019) describes the delicate balance SLPs face in schools ensuring their work has “independence from but connection to the classroom and curriculum” (p. 53).

By acting in the novel capacity of a “tutor” rather than an “SLP in training,” students seemed able to apply course content to a real-world situation where the focus was on a child’s academic growth rather than on developing their clinical skills. In doing so, students were able to better understand the connections between language and academics and reflect on the role of SLPs in relation to other educational professionals. It is important that this specific context led to a better understanding of interventions related to education (e.g., reading, writing) and the relevance of educational policies, since ensuring new SLPs are well-positioned to make an impact in multiculturally-diverse and underserved school communities is an ongoing challenge for graduate programs. Farrugia-Bernard (2018) found that new SLP graduates felt unprepared by their graduate coursework to make a meaningful impact in urban schools with diverse populations and faced challenges adjusting to the needs of these settings and contexts. Given this, identifying ways

to ensure SLPs have the needed comfort level with interventions and educational policies is critical. This assignment seemed to be an example of how to meet this goal.

New SLPs' motivation and confidence to work with school-age children, especially those from underserved communities such as these, is especially important given how K-12 education has been altered since March 2020 by the COVID-19 pandemic. SLPs, given their expertise in language and differentiated instruction, can play a key role in supporting students as members of school-based teams (American Speech-Language-Hearing Association [ASHA], 2010; Powell, 2018). This assignment increased students' confidence to enter the field due to the perspectives and experiences they gained. This example shows promise for service-learning assignments to positively impact graduate students' preparedness to serve school-age children from underserved communities, where their expertise is needed more now than ever.

### **Limitations and Future Directions**

While the results of this study are promising, there are a few notable limitations. First, the data were collected at one large, suburban state university with a relatively small sample size. Secondly, the data were collected in a course focused on language disorders in the population of school-age children, and there was not an opportunity to see if similar results would apply for different populations. Further, results analyzed in this study were based on self-report within the reflection papers, which may not always be reliable. Although care was taken to minimize the risk that the students' responses were biased by the fact the primary author was also the instructor (i.e., ensuring all reflection papers were de-identified, having all analyses take place after course grades were compiled and submitted, including two graduate students on the research team), it is still possible the author's involvement with the assignment impacted the value of the data collected and made students emphasize the positive over the negative. Finally, student learning was gauged by reflection papers, and there was not an opportunity to investigate how students' understanding of concepts or perspectives changed over the course of the semester.

Given the promising results of this study, further research on the impact of this or similar assignments seems warranted. Future studies could examine service-learning assignments similar to this study where students act in the capacity of student clinicians rather than as tutors. It would also be interesting to look at other ways that SLPs could support community organizations focused on preventing school failure, such as through providing professional development or consultation. To more fully gauge whether the assignment was successful in deepening students' understanding of course content, it would be useful to consider collecting pre- and post-assignments to allow a deeper exploration of the impact on student learning. This service-learning project involved all virtual interactions, and it would also be interesting to see how a similar experience would be perceived if either the class or the interaction with children was in person.

### **Conclusion**

Overall, these findings suggest that it is both feasible and meaningful for graduate-level instructors to use service-learning assignments, even in an environment reliant on virtual interactions. The difference between a merely competent clinician and one who makes a true difference in their community is their compassion and ability to adapt to the community's needs. Prompting SLP students to be flexible by taking on a different role (i.e., tutor) as part of a course seemed to be key to deepening the learning associated with this assignment, which resulted in students feeling more

prepared to enter the field. This paper adds to the literature (e.g., Allman, 2013; Bailey & Angell, 2005; Kim & Garcia, 2019; Kleinhans & Hart, 2012; Mahendra et al., 2013) showing courses in speech-language pathology can simultaneously focus on meeting the needs of local communities and educating students, and that this type of learning is feasible in an environment reliant on virtual interactions.

This research study also addresses a timely and important issue of how to prepare graduate students in speech-language pathology to meet the evolving and changing needs of vulnerable populations in public schools as the COVID-19 pandemic continued to unfold. This is a worthwhile topic, given the current and anticipated needs of K-12 children in public schools, which is a key setting where SLPs work. It is also an important topic to explore given the literature that shows that SLPs often feel underprepared to make an impact in low-income and urban schools even during “normal” times and that there is a concern that students are retaining less and are less engaged in online classes in comparison to in-person classes. It is more essential than ever for graduate students coming out of SLP programs to be part of the national effort to meet the needs of school-age children who have faced an extraordinarily challenging situation due to learning loss, school closures, reliance on virtual learning, and other associated stressors.

### Disclosures

The author is a full-time employee of Montclair State University.

### References

- Akyıldız, S. T. (2020). College students' views on the pandemic distance education: A focus group discussion. *International Journal of Technology in Education and Science*, 4(4), 322-334. <https://doi.org/10.46328/ijtes.v4i4.150>
- Allman, T. (2013). Service-learning in communication sciences: Literacy tutoring through a multidisciplinary lens. *Perspectives on Issues in Higher Education*, 16(1), 39-47. <https://doi.org/10.1044/ihe16.1.39>
- American Speech-Language-Hearing Association. (2010). *Roles and responsibilities of speech-language pathologists in schools* [Professional issues statement]. <https://www.asha.org/policy/PI2010-00317>
- Bailey, R. L., & Angell, M. E. (2005). Service-learning in speech-language pathology: Stakeholders' perceptions of a school-based feeding improvement project. *Contemporary Issues in Communication Science and Disorders*, 32(Fall), 126-133. <https://doi.org/10.1044/cicsd.32.F.126>
- Blosser, J., Roth, F. P., Paul, D. R., Ehren, B. J., Nelson, N. W., & Sturm, J. M. (2012). Integrating the core. *The ASHA Leader*, 17(10). <https://doi.org/10.1044/leader.FTR1.17102012.12>
- Bogdan, R., & Biklen, S. (1998). *Qualitative research for education: An introduction to theory and methods, Third edition*. Pearson.
- Bowen, G. A. (2020). *Sensitizing concepts*. Sage Publications, Inc.
- Broadly, K. E., Buckner, E., Umanzor, J., & Wheaton, S. (2021). *Higher education's reopening decisions affected the most vulnerable students*. Brookings. <https://www.brookings.edu/blog/up-front/2021/01/11/1342345/>
- Cavanagh, S. (1997). Content analysis: Concepts, methods and applications. *Nurse Researcher*, 4(3), 5-16. <https://doi.org/10.7748/nr.4.3.5.s2>

- Farrugia-Bernard, A. M. (2018). Unprepared: A qualitative exploration of the preparation practices of SLPs practicing in urban schools. *Teaching and Learning in Communication Sciences & Disorders*, 2(3), 1-17. <https://doi.org/10.30707/TLCSD2.3Farrugia-Bernard>
- Furco, A. (1996). Service-learning: A balanced approach to experiential education. In Taylor, B., and Corporation for National Service (Eds.), *Expanding boundaries: Serving and learning* (pp. 2-6). Corporation for National Service. <https://digitalcommons.unomaha.edu/slceslgen/128/>
- Goldberg, L. R., McCormick Richburg, C., & Wood, L. A. (2006). Active learning through service-learning. *Communication Disorders Quarterly*, 27(3), 131-145. <https://doi.org/10.1177/15257401060270030201>
- Gross, B., Opalka, A., & Gundapaneni, P. (2020). *Getting back to school: An update on plans from across the country*. Center on Reinventing Public Education. [https://www.crpe.org/sites/default/files/getting\\_back\\_to\\_school\\_brief.pdf](https://www.crpe.org/sites/default/files/getting_back_to_school_brief.pdf)
- Hoffman, K. (2020, April 6). We can't avoid the adverse effects of COVID-19 school closures. But we can minimize them. *azcentral*. <https://www.azcentral.com/story/opinion/op-ed/2020/04/06/arizona-covid-19-school-closures-hurt-students-how-minimizethem/2956042001/>
- Hsieh, H. F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277-1288. <https://doi.org/10.1177/1049732305276687>
- Kim, E. S., & Garcia, J. R. (2019). That's so much more important than the grades: Learning client centered care through experiential learning at aphasia camp. *Teaching and Learning in Communication Sciences & Disorders*, 3(2), 1-18. <https://doi.org/10.30707/TLCSD3.2Kim>
- Kleinhans, K. A., & Hart, S. B. (2012). Administration: Opportunities for enhanced clinical experience through regional stewardship. *Perspectives on Administration and Supervision*, 22(2), 64-70. <https://doi.org/10.1044/aas22.2.64>
- Kuhfeld, M. & Tarasawa, B. (2020). The COVID-19 slide: What summer learning loss can tell us about the potential impact of school closures on student academic achievement. *Collaborative for Student Growth at NWEA*. [https://www.nwea.org/content/uploads/2020/05/Collaborative-Brief\\_Covid19-Slide-APR20.pdf](https://www.nwea.org/content/uploads/2020/05/Collaborative-Brief_Covid19-Slide-APR20.pdf)
- Levine, H. (2020, March 31). Parents and schools are struggling to care for kids with special needs. *The New York Times*. <https://www.nytimes.com/2020/03/31/parenting/kids-special-needs-coronavirus.html>
- Lincoln, Y. S., & Guba, E. G. (1985). Establishing trustworthiness. *Naturalistic Inquiry*, 289(331), 289-327.
- Mahendra, N., Fremont, K., & Dionne, E. (2013, April). Teaching future providers about dementia: The impact of service-learning. *Seminars in Speech and Language*, 34(1), 5-17. <https://doi.org/10.1055/s-0033-1337390>
- Maxwell, J. A. (2005). *Qualitative research design: An interactive approach* (2nd ed.). Sage Publications, Inc.
- Morse, J. M., & Field, P. A. (1995). *Nursing research: The application of qualitative approaches*. Nelson Thornes.

- Powell, R. K. (2018). Unique contributors to the curriculum: From research to practice for speech-language pathologists in schools. *Language, Speech, and Hearing Services in Schools*, 49(2), 140–147. [https://doi.org/10.1044/2017\\_LSHSS-17-0059](https://doi.org/10.1044/2017_LSHSS-17-0059)
- Power-deFur, L. A. (2016). *Common core state standards and the speech-language pathologist: Standards-based intervention for special populations*. Plural Publishing.
- Rampin, R., Rampin, V., & DeMott, S. (2021). *Taguette* (Version 0.10.1). [Online software]. Zenodo. <https://www.taguette.org/>
- Seidman, I. (2006). *Interviewing as qualitative research: A guide for researchers in education and social sciences* (3rd ed.). Teachers College Press.
- Stefaniak, J. (2020). A systems view of supporting the transfer of learning through e-service-learning experiences in real-world contexts. *TechTrends*, 64(4), 561-569. <https://doi.org/10.1007/s11528-020-00487-3>
- Strauss, A., & Corbin, J. (1998). *Basics of qualitative research techniques*. Sage Publications, Inc.
- Strauss, V. (2020, July 15). Virtual education was ‘a disaster’ for her son with Down syndrome. Here’s what students with disabilities really need. *The Washington Post*. <https://www.washingtonpost.com/education/2020/07/15/virtual-education-was-disaster-my-son-with-down-syndrome-heres-what-students-with-disabilities-really-need/>
- Theodosiou, N. A., & Corbin, J. D. (2020). Redesign your in-person course for online: Creating connections and promoting engagement for better learning. *Ecology and Evolution*, 10(22), 12561-12572. <https://doi.org/10.1002/ece3.6844>
- Ukrainetz, T. A., & Fresquez, E. F. (2003). What isn’t language? *Language, Speech, and Hearing Services in Schools*, 34(4), 284-298. [https://doi.org/10.1044/0161-1461\(2003\)024](https://doi.org/10.1044/0161-1461(2003)024)
- Ukrainetz, T. A. (2019). Sketch and speak: An expository intervention using note-taking and oral practice for children with language-related learning disabilities. *Language, Speech, and Hearing Services in Schools*, 50(1), 53-70. [https://doi.org/10.1044/2018\\_LSHSS-18-0047](https://doi.org/10.1044/2018_LSHSS-18-0047)
- Veyvoda, M. A., & Van Cleave, T. J. (2020). Re-imagining community-engaged learning: Service-learning in communication sciences and disorders courses during and after COVID-19. *Perspectives of the ASHA Special Interest Groups*, 5(6), 1542-1551. [https://doi.org/10.1044/2020\\_PERSP-20-00146](https://doi.org/10.1044/2020_PERSP-20-00146)
- Waldner, L., McGorry, S., & Widener, M. (2010). Extreme e-service-learning (XE-SL): E-service-learning in the 100% online course. *MERLOT Journal of Online Learning and Teaching*, 6(4), 839-851. [https://jolt.merlot.org/vol6no4/waldner\\_1210.pdf](https://jolt.merlot.org/vol6no4/waldner_1210.pdf)