

Service learning as an alternative to traditional clinical placements: Experiences of student speech pathologists

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Service learning is a collaborative approach to teaching and learning built around reciprocal relationships between universities and community organisations. Recently, the University of Canberra established the 'Good Start in Life' (GSIL) service-learning program to address growing gaps in all domains of child development. This study explores experiences and perceptions of ten speech pathology students who participated in this program as part of their clinical placement. Qualitative data was collected during focus groups. Data was transcribed and analysed in NVivo using thematic analysis. Four themes emerged: confidence in communicating, consolidation of course content, delivering services across the community, and student experiences of workload and supervision. The results highlighted the value of working across community settings to increase students' ability to adapt their communication in different contexts. Results indicate participation in the GSIL service-learning program supported student clinical competency development, suggesting that service-learning may be a suitable alternative to traditional clinical placements.

Keywords: Service learning, interprofessional collaboration, clinical education, speech pathology, work-integrated learning

Clinical placements are considered invaluable to the learning and development of speech pathology students (Thomasz & Young, 2016). Placement experiences provide students with the opportunity to apply their theoretical knowledge across a range of practice areas, with a variety of caseloads, and at different levels of intensity to develop entry-level competency (Attrill et al., 2020; Sheepway et al., 2014). Indeed, students often report developing a sense of mastery during clinical placements (Brumfitt & Freeman, 2007; Sheepway et al., 2014). However, in recent years, sourcing appropriate placements has become increasingly difficult, prompting universities to begin investigating the viability of alternate placement models (Ferguson et al., 2010; Rodger et al., 2008; Thomasz & Young, 2016). Service-learning programs have been positioned as a possible alternate form of experiential learning to supplement conventional clinical placements (Valencia-Forrester et al., 2019).

The purpose of this study is to explore the experiences and perspectives of speech pathology students who engaged in a service-learning program as part of their clinical placement opportunities. First, we review the literature on service learning and clinical placements in allied health. Next, the paper describes the service-learning placement experiences provided to the speech pathology students who participated in this study and the qualitative research methods used in the study. Finally, the paper discusses the key emerging themes and perspectives from the participants and the potential implications for future service-learning placements in allied health. This study reports only on the student experiences and outcomes. Outcomes and experiences of community partners are reported in other publications from the research team (e.g., Hilly et al., 2023; Kish et al., 2024; McKechnie et al., 2024).

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BACKGROUND

The Service-Learning Approach

Service-learning is an approach to teaching and learning which requires students to use skills acquired at university to provide services to their community (Dienhart et al., 2016; Weglarz & Seybert, 2004). Built around reciprocal relationships between community organizations and universities, service-learning programs are designed to address gaps in local services in a way that provides students with practical experiences directly relevant to their coursework (Salam et al., 2019). Indeed, the major point of difference between service-learning programs and traditional clinical placements is that service-learning programs are mutually beneficial to students and community organizations (Bringle & Hatcher, 2002; Harris et al., 2010). Research suggests that involvement in speech pathology service-learning programs can consolidate understanding of course content whilst also improving students' ability to communicate effectively and identify access barriers within their communities (Crawford et al., 2017; McMenamain et al., 2010; Rutti et al., 2016).

Due to growing student numbers and the increased demands being placed on allied health systems, there is currently an international shortage of placement opportunities (Ferguson et al., 2010; Rodger et al., 2008). To be eligible for professional certification in Australia, speech pathology students are currently required to demonstrate entry-level competence with a range of adult and pediatric caseloads across all areas of practice (i.e., speech, language, fluency, voice, swallowing, multimodal communication) (McAllister et al., 2013). This requirement challenges universities further, making it increasingly difficult to provide students with equal opportunities for clinical skill development (Hewat et al., 2020). Consequently, universities have begun exploring the potential of service-learning programs to broaden the scope for the types of practical experiences they can offer their students (Rodger et al., 2008; Thomasz & Young, 2016).

Outcomes of Service-Learning

Service-learning programs have been reported to support the development of preclinical skills across a range of practice areas, including speech, language, swallowing, and multi-modal communication (e.g., Allman, 2013; Bailey & Angell, 2005; Brebner et al., 2017; Reading & Padgett, 2011). Services have been established across a variety of educational and community and settings to support a range of marginalized groups, including incarcerated mothers (Pace et al., 2019), hearing impaired people (Pakulski, 2011), and elderly people with dementia (Fremont et al., 2013). A common finding across these studies was that students were encountering members of these populations for the first time. Through practical experience and guided reflections, these students were challenged to overcome their apprehension, modify previously held beliefs, and gain confidence communicating with these client populations (Fremont et al., 2013; McMenamain et al., 2010; Pace et al., 2019; Pakulski, 2011).

The focus that service-learning programs place on civic responsibility is reported to enhance students' connection to their communities, and their understanding of how they can make a difference in their chosen profession (Harris et al., 2010; Valencia-Forrester et al., 2019). In one Australian study, student-led clinics were established in rural primary schools (Kirby, Held, et al., 2018; Kirby, Lyle, et al., 2018). The reported satisfaction of parents and teachers was high, with one quarter of children having their communication problems resolved (Kirby, Held, et al., 2018). Through their support of this community, students gained deeper understanding of course content as well as how unequal distributions of resources may exacerbate communication disorders (Kirby, Held, et al., 2018; Kirby,

Lyle, et al., 2018). While some studies have questioned the reliability of service-learning programs (Goldberg et al., 2006; Peters, 2011), the approach itself has been recognized as a flexible methodology for supporting students' civic engagement and move towards clinical competency (Crawford et al., 2017; McMEnamin et al., 2014).

While the use of service-learning as a model of work-integrated learning (WIL) in Australia has seen an increase since the national *WIL Report* of 2009 (Patrick et al., 2009), it remains relatively under-developed compared to in other nations such as the USA (Patrick et al., 2019). There continues to be some lack of clarity around the definition of service-learning, with the approach also remaining relatively new to WIL (Patrick et al., 2019). To date, little attention has been paid to the early years of child development and the potential scope for student-led service-learning programs to contribute to community services such as playgroups and childcare centers. The University of Canberra's Good Start in Life project is one such program.

THE GOOD START IN LIFE PROGRAM

The Good Start in Life (GSIL) program is a novel service-learning project that has been recently established in Canberra to address growing gaps in all domains of child development. GSIL is a multi-site, multi-component program that includes input from professionals across multiple disciplines, namely occupational therapy, nutrition, social work, and speech pathology. The present study will focus on the speech pathology component of this project, which aims to support the language and emergent literacy skills of preschool children in 'at-risk' areas of Canberra.

Preschool children have received little attention in the service-learning literature, despite being the most prevalent client cohort for speech pathologists (Peters, 2011; Radcliffe et al., 2014). Deficits in language and communication skills during early childhood have been associated with lower literacy skills, poorer academic achievement, and reduced vocational prospects (Law et al., 2009). Early intervention is key; however, the national shortage of speech pathology services means that the number of children not reaching their milestones is growing (Radcliffe et al., 2014). Indeed, data from the 2021 Australian Early Development Census (AEDC) for the ACT indicated that 16.9% of children were identified as being developmentally delayed for language and cognitive skills during their first year of school (Australian Government, 2018). This represents an increase from 15.8% in 2018 and 13.4% in 2012 (Australian Government, 2012). In terms of communication skills, results from the 2018 AEDC indicated that 27.5% of ACT children were not on track, compared to a national average of 22.7% (Australian Government, 2018). These statistics show a worrying trend, indicating that there is an immediate need to design strategies to support the language development of children in Canberra.

The speech pathology component of the GSIL project was established to address declines in language and emergent literacy skills by providing targeted coaching to parents and early childhood educators (ECEs). Research indicates that high quality early education programs can act as a protective factor for children (Sylva et al., 2004). However, a majority of ECEs report having received little to no training on how to facilitate language development (Mroz, 2006). Moreover, there is a social gradient in the quality of early childhood education and care services (ECECs), with the services of the highest quality being situated in more advantaged areas (Tayler et al., 2013). To confront this social disparity, the first stage of the GSIL program has been set up in the 'at risk' area of Belconnen (Australian Government, 2009, 2012, 2018). Through a series of professional learning events and collaborative coaching sessions, speech pathologists and students involved in this program have been working to provide ECEs and

parents with the specialist knowledge needed to create language-rich learning environments for children.

The Good Start in Life Placement Model for Speech Pathology Students

The speech pathology component of the GSIL program is incorporated as part of a split placement model, with students spending two days at the university clinic, and two days delivering the GSIL services. Both placement settings are fully supervised, however, the students have two supervisors – one per context - who share responsibility for the overall assessment of student competence at the end of the placement block. On the days they participate in the GSIL program, students work across a variety of community playgroups and ECECs. The specific programs and services delivered by students are needs-based and site-dependent. Services include providing parents with education around child development, demonstrating techniques to early childhood educators to promote positive and responsive interactions, and running the manualized ‘Read it Again’ preliteracy program for preschoolers.

Opportunities for reflection and feedback are built into the GSIL program. Structured reflection facilitates the development of new knowledge by supporting students to identify the links between theory and practice (Helyer, 2015). In the context of service-learning, reflection also supports students to gain deeper understanding of the social issues in their communities (Valencia-Forrester et al., 2019; Veyvoda & Cleave, 2020). On the GSIL placement, students complete verbal reflections after each occasion of service using the Pendleton model (Pendleton et al., 1984). Later in the week, students are required to submit written reflections along with planning for the following week. Written feedback is provided by their supervisor at the end of each week. In this way, students are supported to identify their strengths, form plans of action for improvement, and reflect on their experiences in the community.

The Present Study

The GSIL program is the first of its kind in Canberra, and one of the first service-learning programs designed to target preschool language development in an Australian context. Given the reciprocal nature of service-learning programs, the success of this interprofessional collaboration must be gauged by looking at the benefits to children, parents, and ECEs, as well as the benefits to the speech pathology students involved in the program (Bringle & Hatcher, 2002; Ginsberg, 2007; Salam et al., 2019). The present study looks to explore the latter.

The aim of this research is to investigate the experiences and perceptions of speech pathology students involved in the GSIL service-learning program. Since the GSIL program is still in its infancy, there is a need to identify the structural components that are and are not working for students. The data collected will provide insight into the benefits of this program and how it could be adapted to better promote student learning. This research will also provide a deeper understanding of the benefits of the service-learning approach more generally. Given the previously mentioned lack of clinical placements, these findings will be highly valuable to universities looking to integrate service-learning programs into their courses (Valencia-Forrester et al., 2019).

The study seeks to answer the following research questions:

1. What are the student experiences and perceptions of speech pathology service-learning programs in early childhood community and education services?

2. What clinical and professional skills do speech pathology students develop from service-learning programs in early childhood community and education services?
3. What are the benefits and challenges of the Good Start in Life model of service-learning placement, specifically?

METHODOLOGY

A qualitative approach using semi-structured focus group interviews was chosen to facilitate flexible, reflexive exploration of the experiences of speech pathology students involved in the GSIL service-learning program. Data collected from qualitative studies is argued to present a broader picture of social experiences and perceptions, allowing researchers to explore shared social realities whilst also investigating variation in peoples' experiences (Azungah, 2018; Power et al., 2018).

Ethics approval for this study was obtained from the University of Canberra Ethics Committee (Protocol Number: 10440). Recruitment for this study took place during June and July of 2022 and was based on active participation in the GSIL program. To ensure the data represented the fullest breath of student perspectives, all those who responded to the recruitment email and met eligibility criteria were included within this study.

A focus group design was selected because its flexible and collaborative nature makes it well-suited to exploring student perceptions (Bertini, 2012). Focus groups are argued to produce a broader range of opinions and ideas by enabling participants to bounce ideas off each other and share their own experiences for discussion (Belzile & Öberg, 2012; Grabowski et al., 1992).

Participants

Participants for this study were speech pathology students, aged 24-39 (9 females, 1 male), who had participated in the GSIL program as part of their clinical placement. To be eligible for recruitment into this study, participants must have:

1. Completed or be in the process of completing their Masters of Speech Pathology,
2. Participated in the GSIL placement program,
3. Completed at least 50% of their GSIL placement, and
4. Be available to attend via Microsoft Teams on one of the days the focus groups ran.

At the time that the focus groups were run, fourteen students met criterion three. Participants were recruited via their student emails and via social media. Three students were not contactable via email or via social media, while one student was not available to attend. Of the ten students that participated, three were graduate speech pathologists and seven were final year students.

Procedure

Data were collected during two focus sessions, each 60 minutes in length, which were run by a third-party interviewer via Microsoft Teams. Prior to the focus group sessions, informed consent was obtained. All participants were advised that data would be transcribed and that they would each be assigned a unique identifier to ensure their anonymity throughout the processes of data coding and analysis and in any publications arising from this work. To minimize the risk of sensitive information being shared during focus groups, a discussion was had prior to each session reminding students of their responsibilities as per the Speech Pathology Australia Code of Ethics with respect to client confidentiality (Sim & Waterfield, 2019).

A focus group interview schedule (see Appendix A) was developed to explore student experiences and perceptions, looking specifically at the perceived benefits and challenges of the GSIL program. During focus group sessions, the interviewer was encouraged to take a reflexive approach to data collection, using the interview schedule as a guide. The goal was to prioritize the in-depth exploration of participants' perceptions (Braun & Clarke, 2022). This more fluid style of interviewing is argued to be better suited to data collection for reflexive thematic analysis since it enables the interview to actively respond to the participants' developing accounts (Braun & Clarke, 2022; Connelly & Peltzer, 2016).

Data Collection and Analysis

Focus group interviews were audio and video recorded, and automatically transcribed using the Microsoft Teams software. The transcripts were then reviewed alongside the recordings to check for accuracy. Errors in the transcript were corrected manually and any identifying information disclosed during the focus group sessions was removed to protect anonymity and confidentiality.

The process of member checking was then undertaken to ensure the trustworthiness of the collected data (Candela, 2019; Thomas, 2017). Personal contributions to the transcript were emailed to the participants along with a written summary of their focus group session. Participants were given the opportunity to clarify their contributions to ensure that their experiences were represented accurately (Candela, 2019). None of the participants indicated that they wanted to make adjustments, therefore, the transcriptions were imported directly into NVivo for coding (Leech & Onwuegbuzie, 2011).

Transcribed data was coded and analyzed using reflexive thematic analysis, following the six-stage process developed by Braun and Clarke (2006, 2013, 2022). This methodology was chosen because of its flexibility and potential for in-depth exploration of participants' contextually situated perceptions, and experiences (Braun & Clarke, 2006, 2013; Chapman et al., 2015). In practice, thematic analysis involves minimally organizing data into themes, which catalogue patterns of meaning anchored by shared concepts (Braun & Clarke, 2006, 2022). Data from the present study was coded into themes based on patterns in semantic content, recognizing the opinions directly communicated by participants.

Once the data was imported into NVivo, an unrefined map of codes and themes was generated, based largely on insights gained after repeat reading of the transcript data. Codes and themes were then refined in an iterative process involving continued reading, listening, and analysis. Final themes were generated inductively by reading and interpreting participant responses and reflecting on patterns of meaning generated and their relevance to the research questions. The data is presented as an analytic narrative, using curated data extracts to support the dominant themes and illustrate sub-themes.

RESULTS

Four key themes were generated from the data: confidence communicating as a speech pathologist; consolidation of course content; delivering services across the community; and student experiences of workload and supervision. Themes reflect patterns of participant responses and include perceived challenges and benefits relating to service-learning as a clinical placement model.

Confidence Communicating as a Speech Pathologist

This first theme relates to students' experiences learning to communicate confidently and effectively with clients. Students discussed the challenges they faced learning to adapt their communication, manage group dynamics, and become more confident interacting with different groups of people. Indeed, a

core feature of the GSIL program is that students are required to deliver services to a range of client populations. Students reflected on initial feelings that they could not interact effectively with specific clients, with one student stating:

I had a challenge in that I was never very confident with very small children or in language stimulation. I always preferred older children, adults, still do honestly. But I think it did really help my knowledge in that area having to do it...Overcoming that challenge of not being confident and not knowing. Participant 6

Similarly, other students reflected on how this placement helped them to gain confidence in coaching and communicating with adults in a professional capacity.

When it comes to teaching, particularly educators and parents, actually, I get a fair bit of impostor syndrome because, you know, I'm not a parent and I'm not an educator. So, I kind of think who am I to tell you how to parent your children?... it's one of those things that if you're not exposed to it, you're just not comfortable with it. Participant 7

Students noted that being exposed to multiple client populations not only increased their confidence communicating in a specialized capacity, but also helped them to alter their communication to suit their audience. Participant 8 said "Sometimes I struggled to like, say, things in layman's terms...So, I found it really beneficial to like, for me just to kind of adapt my language to be more appropriate for the audience." Another student reflected that different ECEs had different levels of engagement, which required them to adapt their teaching strategies and think creatively to encourage active learning "One centre was less engaged than another centre we went to...It required us to step it down for them a lot and actively think of ways to get them to, to be more involved." (Participant 3).

The ability to adapt communication and teaching strategies to suit clients of different ages, levels of understanding, and engagement is a key skill for speech pathologists to facilitate participation in intervention. This ability to actively respond to clients' needs was discussed further in relation to managing group dynamics. As part of the GSIL program, students delivered a series group lessons targeting pre-literacy skills. Running these groups required students to adapt their language to suit children of different capabilities, while also managing challenging behaviors. One student commented "Even within the same centre, the level of children were quite different. We needed to step it up and down actively" (Participant 2).

By giving student opportunities to deliver services to parents, ECEs, and children, both one-on-one and in groups, the GSIL placement supported students to gain confidence communicating in a professional capacity, the ability to adapt their communication styles to suit client needs, and to actively respond to different levels of engagement and understanding.

Consolidation of Course Content

This theme relates to student perceptions of knowledge gained while on placement. Multiple students stated that delivering services to children in the community consolidated their understanding of typical development, with one student stating:

It's ... been really helpful to conceptualise just the breadth of what is typically developing... when you're working in that clinic environment, you're just kind of seeing the more severe kind of

disordered end [sic]...this has been like really helpful to contextualise just that range. Participant 4

Given that preschool children are the most prevalent client cohort for speech pathologists (Radcliffe et al., 2014; Peters, 2011), consolidation of knowledge around age-appropriate skills was seen as highly valuable, particularly for those students with little experience interacting with children.

A significant portion of our cohort have children. So, they have like, like hands on experience with...children. Whereas I think like a lot of younger people like us, it's so much more theoretical. So, ... it was helpful to see it. Participant 10

Students also discussed gaining deeper appreciations of many speech pathology interventions, namely dialogic reading, and language stimulation.

I've learned a lot about language stimulation...obviously I knew about it before, but my other placements...I didn't really have the opportunity to spend time with kids like I do now. So, it's been really good to kind of see how to do it in practice...and like the benefits that the children can get from it. Participant 8

This theme also contained reflections on challenges and facilitators to the consolidation of theoretical knowledge, with some students reflecting that additional discussion or observation could have extended upon their learning. Participant 3 (referring here to language stimulation techniques which are part of child-led intervention strategies in speech pathology):

I felt that maybe with some of the language stim...we weren't really given an opportunity to observe like our supervisor giving the language stim first. I think we were kind of thrown in, which in a way it was good, but maybe yeah, it would have been nice to maybe see.

So, we did like sort of the rationale of, like, kind of 'this preliteracy is good and like it's helping the children' and that kind of thing. But if we could also like move into...how we're like delivering the lessons and like maybe like more about like the Read it Again program itself and what we're actually specifically delivering each week and things like that. Participant 10

Another student reflected that the highly structured nature of the 'Read it Again' program supported their learning, by providing explicit goals and a clear methodology: Participant 9: "Like I guess having, having the goals already there and being able to build on the goals. That scaffolding... it's just helpful to consolidate what we learn at uni."

Having the opportunity to deliver services to a range of clients across the community has consolidated students' understanding of the breadth of typical development, and how speech pathology interventions may be implemented to support preschool-aged children. Additional opportunities for observation and discussion may work to scaffold learning for future students.

Delivering Services across the Community

This theme concerns student reflections on the impact that delivering community-based services had on their adaptability and awareness of barriers within their community. A core feature of the GSIL placement is that students are required to deliver services across a range of community settings. Students discussed the benefits of working across multiple environments in relation to improved flexibility of practice:

I think something that's beneficial potentially about it is the fact that you're actually in a natural environment...So, the people I see now for early language stimulation, they're in their house and there's like kids everywhere and it's not that different to a childcare centre ... So, I think it's that ability to work in multiple environments. Participant 6

Students also reflected on how working outside of a clinic setting improved their community knowledge and understanding of their professional role within the community "You get a sense of like how speech pathologists can work in different settings and also how broad our responsibilities can be...more idea about our role in the real-world clinical practice." (Participant 1) and "I'm not from Canberra, so it's been really instrumental in getting to know the area. I think it's really important to know the community that you're working in." (Participant 4).

Service-learning programs have been reported to increase students' connection with/to their communities and awareness of social inequalities existing in their local area (Harris et al., 2010; Valencia-Forrester et al., 2019). Indeed, further discussion was had around the barriers to accessing services in the local area, with one student stating:

I understand they (the ECECs) were identified as like areas of need. But like it seemed like there were like a lot of kids who really could benefit from, like further intervention. But there's just like, not enough resources...I found that, I guess, kind of sobering in a way. Participant 10

This theme also captured student reflections on the challenges of delivering services across community settings, with multiple students discussing difficulties around the continuity and engagement of ECEs:

We found...that like the continuity with the educators, like a lot of them aren't there for multiple weeks in a row...and it's really hard to, like, get everyone on board with the strategies that we're trying to teach. Participant 8

Participant 3: "I felt like they didn't have enough time throughout the week to, like, reflect on what they saw with the reading group and that kind of thing."

The unreliable nature of community-based learning has been noted in the literature, with low turnout and cancellations all impacting student learning opportunities (Goldberg et al., 2006; Peters et al., 2011). Most students suggested that more frequent educational meetings with community partners are needed to ensure that their expectations align with those of students and universities. However, one participant highlighted the value of facing such challenges:

It could be different educators every single week and you didn't know what they were gonna ask you or what they were gonna talk about. And you just had to...kind of figure it out on the spot. And I think that's been very valuable, I suppose, because then when things like that happen...Now, I don't panic as much. Participant 6

While working across community settings poses unique challenges to service provision, overcoming these challenges may support flexibility of practice, while also providing students with the opportunity to get to know their communities and their role as speech pathologists outside of private practice.

Student Experiences of Workload and Supervision

This theme was generated from student reflections on the workload and feedback opportunities included as part of this placement program to facilitate their learning. Student experiences of the workload were largely positive, with one student stating “I think the expectations were made pretty clear from the start. Yeah, it was one of the benefits, actually, is just how clearly things were communicated to us.” (Participant 4).

Others discussed the value of collaborating with peers to complete work and deliver services “I found that like split between 3 that was very manageable.” (Participant 10) and “So, we kind of like rotated around what activity we were doing with the kids each week. So that was really good for, yeah, teamwork and working really closely with teams.” (Participant 3).

However, one student reported that they found the workload overwhelming. They noted that the amount of face-to-face work they were doing during the day meant that they were unable to sit down to do written preparation:

We were assessing lots of children in the day...So, it was like, you know, we didn't really get to sit down by the end of the day. And then if you don't sit down during the day doing homework, when you get home is hard. Participant 9

A similar contrast of experiences was seen in relation to the placement feedback model. Students were given verbal feedback on performance immediately after each instance of service delivery and written feedback on their weekly preparation two days later. While one student felt that this structure supported their learning, another stated that it felt disconnected:

I think the... the flow like that way it will be good for us as a, because you know...I think it's on Monday and Tuesday, we are given feedback and also we will provide our own reflection within the two days and then we will do our best to improve or change our performance. So, I think that will be a great learning process for us. Participant 2

We'd go see the pre-school and then we'd like debrief about that. And then we'd like later in the week we'd do like our preparation for the next one. And so, I think that like that was a bit disconnected. Participant 10

In part, this feeling of disconnect may be caused by the split placement model, which meant that students only had face-to-face contact with their GSIL supervisor two days each week. Indeed, one of the participants, who disclosed that they had failed their placement, reported difficulties managing the workload due to the split placement model:

But you're also in the clinic Wednesday, Thursday. Um, we'd hand in our clinic homework for Monday and then if we got feedback on it, it was very hard to action on it because we'd be a Good Start in Life Monday, Tuesday and you're not sitting down and then you're sleepy. Participant 9

A further challenge was discussed by a participant who disclosed that she had a chronic pain condition and stated that “in a way that it wouldn't be for an able-bodied person, it was quite physically challenging for me” due to the action of repeatedly “getting to the floor and getting up” while delivering services in the ECECs. When asked how this placement could be adapted, the participant stated:

If I could say one thing, it's like, like if it can be really like nerve-wracking to sort of advocate for yourself with kind of like disability stuff. So, I just kind of say if there was one thing you could do, it would just be like kind of say like 'if you're having difficulties, let us know and we can discuss it.' And then that way like people will think we can like negotiate it. Participant 10

While students had largely positive experiences of the workload and supervision, the split-placement model and physically demanding nature of the program posed challenges for some students, making the placement feel disjointed and tiring. However, others reflected that the collaborative nature of the program and cycle of feedback was beneficial to their learning.

DISCUSSION

The GSIL project is a novel service-learning program designed to address gaps in child development while also supporting students' move towards clinical competency. Results from this study suggest that the GSIL program has capacity to consolidate theoretical knowledge and to give students the skills needed to practice effectively across contexts. Students reported improvements in their ability to collaborate with peers, deliver services, and to communicate confidently with clients. Service-learning programs often provide students with their first experiences working with specific client populations and support them to overcome initial feelings of apprehension (Jagoe & Roseingrave, 2011; Kaf et al., 2011; McMenamin et al., 2010). Indeed, multiple students from this study highlighted the value of experiential learning in helping them overcome their 'imposter syndrome' to feel more confident stepping into the role of the clinician.

A novel finding from this study was student perceptions of improved adaptability and flexibility of practice. They related these benefits to the structure of the GSIL program. Most service-learning programs require students to work within one community organisation (Fremont et al., 2013; Jones et al., 2017; Pace et al., 2019). However, the multi-site, multi-component nature of the GSIL placement enables students to work across a range of settings, delivering different program types to clients of different ages and levels of engagement. This model broadens the scope for the types of experiences students may have while delivering services, thus supporting their ability to adapt their communication and teaching strategies to suit different client populations, environments, and service-delivery models (e.g., group vs. one-on-one). Adaptability is a valuable skill for graduate speech pathologists. Indeed, the ability to adapt to client needs is listed as a performance criterion in the Speech Pathology 'Competency-based Occupational Standards,' which are used to evaluate students' competency (McAllister et al., 2013).

In terms of consolidated knowledge, results suggest that students found working within the community deepened their understanding of key concepts, including the breadth of typical development, their role as speech pathologists, and of the social disparities in their community. Through hands-on experience and guided reflection, students were able to gain a more holistic understanding of these concepts, in a way that they likely would not have been able to had they attended a standard in-clinic placement. This aligns with previous research highlighting how direct contact with the community strengthens students' ability to identify and remove barriers in their local communities (Harris et al., 2010; Valencia-Forrester et al., 2019). However, students also suggested that additional opportunities for observation and discussion could have further extended upon their learning.

This study also looked to explore the perceived challenges of the GSIL placement. The inconsistency in the engagement and continuity of ECEs was described by multiple students as a key barrier to effective service provision. The unreliable nature of community-based placements has been noted in

the literature, with previous studies reporting that frequent cancellations, low turnout, and poor client engagement can compromise learning opportunities for students (Goldberg et al., 2006; Peters et al., 2011). Student suggestions for overcoming this challenge align with those in the literature: more frequent meetings between educators and directors are required to ensure that there is a shared understanding of the project goals (Goldberg et al., 2006). However, given staffing shortages in the childcare sector, it seems likely that these challenges may be inherent to a preschool setting and, thus, to the GSIL program (National Skills Commission, 2022).

Additional components of the program discussed by students were the feedback model and workload. While students had largely positive experiences of these placement components, the physically demanding nature of the program and the split-placement model posed challenges for some students. Workload management is a common problem for split-placement programs, since students are required to complete two sets of work (Davies et al., 2019). To address this, additional coordination between supervisors for each component of the placement may be required. Early acknowledgment of the physical nature of this placement and the potential need for adjustments is also required to make this placement more accessible.

IMPLICATIONS

Given the growing lack of placements opportunities, there is an immediate need for universities to begin exploring new options for the types of practical experiences they can offer students. Previous research has identified service-learning as a flexible, high-impact approach that can support students' clinical skill development (Rutti et al., 2016; Valencia-Forrester et al., 2019). The present study supports and expands upon this research, providing evidence to suggest that the multi-site design of the GSIL program broadens scope for the types of experiences students may have while delivering services, and thus enhancing their perceived adaptability and flexibility of practice. Overall, this research suggests that the GSIL program is a viable option for supporting student learning and that service-learning programs more generally may be suitable for integration into speech pathology courses. More broadly, this study lends further support to the conclusions of Patrick and colleagues (2019) that there is scope for the expansion of service-learning programs into disciplines beyond pre-service teacher education and suggests that service-learning could be considered as an alternative to traditional clinical placements in other allied health disciplines that are also facing placement shortages.

LIMITATIONS

Results suggest that the GSIL program is a valuable learning experience to students, however, it is important to note that the reciprocal nature of service-learning means that the success of the GSIL program cannot be gauged without also exploring the benefits for supervisors and clients (Ginsberg, 2007; Salam et al., 2019). Future research could evaluate the GSIL program from the perspective of supervisors and community partners and compare those findings to the present study.

Moreover, there is large variation in the way that service-learning programs are designed (e.g., Kirby, Held, et al., 2018; Krishnan et al., 2020; O'Neil-Pirozzi, 2012). While this broadens the scope for the types of experiences that can be offered, inconsistency in how programs are implemented means that it is unclear which aspects are beneficial to students. Therefore, although the results from this study do align with previous research, novel findings around benefits of multi-site service delivery may not generalize. Additional research is required in this area.

CONCLUSION

This study explored the perceptions and experiences of speech pathology students involved in a novel service-learning program. Results were largely consistent with previous findings, with students describing improvements in their confidence communicating in a client-centred manner and their understanding of course content. Results also highlighted the perceived value of working across community settings to increasing students' community knowledge and ability to adapt their communication strategies across contexts. Key challenges of the GSIL service-learning model were inconsistencies in engagement of ECEs and the increased workload due to the split-placement model. Overall, the GSIL service-learning program presents as a viable option for supporting students' move towards clinical competency.

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APPENDIX A: Focus group interview guide.



DISTINCTIVE BY DESIGN

Service Learning – Supporting Student Skill Development and Community Engagement:

Service-learning Focus Group

Interview Guide for Student SLPs – post-involvement follow up

Introduce self and refer to earlier contact when the interview time was made.

Give reminder of project as required:

Words like: This project is funded by the Medical Research Futures Fund to improve health outcomes for children and families in the Belconnen area. One of the challenges identified by service providers for preschool children across Canberra was speech and language difficulties. In partnership with the UC Health Hub, student speech pathologists under the direction of a clinical educator have been involved in a range of community-based service-learning programs, working on a range of projects across the Canberra region designed to provide specialist knowledge and targeted support to at risk children, their parents, and their childcare educators. The purpose of this interview is to explore your perceptions of service learning as the format for your clinical placement/clinical education. We also want to discuss your experiences around the delivery of these services to support the speech and language development of children in the community, and to provide their parents and educators with targeted learning and coaching opportunities (either telehealth or in person). This will allow us to understand if any changes need to be made to the service-learning model for future students.

Give reminder of confidentiality requirements:

Words like: As students, you are expected to adhere to the confidentiality requirements outlined in the Code of Ethics set forward by Speech Pathology Australia. We ask that you do not mention any of the children, parents, or educators by name, or disclose any of their personal or medical information. If you do disclose any personal details, they will be edited out in the transcript.

- Ask participant to read information letter
- Check that participant understands and is happy to proceed, answer any questions or concerns.
- Complete consent form.
- Consent for audio taping.

#IDENTIFIER PSEUDONYM

Section 1 Demographic and course completion information

Notes to interviewers: Notes to interviewers: Section 1 is looking for factual information, but it can be as conversational as possible.

Words like: *In the first part of the interview we ask some questions about you, your previous qualifications and the professional practice unit that your service learning experiences were attached to.*

1. Gender: _____
2. Age: _____
3. Previous qualifications _____
4. location _____
5. During which professional practice unit did you undertake the service-learning placement:
 - a. Intermediate
 - b. Approaching Entry Level
 - c. Entry Level
6. Which format/s did your service-learning program take?
 - a. Telehealth
 - b. Small group in-person workshops plus individual on-site coaching
 - c. Embedded/on-site speech pathology demonstrations and coaching
 - d. Playgroup-based intervention
7. With which population/s did you work directly?
 - a. Children
 - b. Child Educators
 - c. Parents
8. Which intervention/s were you exposed to?
 - a. Learning Language and Loving It
 - b. Read It Again
 - c. Interactive book reading with toddlers
 - d. Parent coaching/education in language stimulation strategies (e.g., playgroup-like settings)
 - e. Loose parts play

Section 2 Perspectives on Service-learning as a clinical placement

Note to interviewer: This section is about understanding participants experience of service learning as the context for clinical skill development. It can be as conversational as possible.

Words like: I am wondering if you could tell me ...

1. What were the most helpful components of the placement?
2. What new skills did you develop from participating in this placement?
3. Tell us about any challenges you may have faced whilst participating in the placement?
4. How could this program be adapted to better support your skills development?
 - a. Prompts could include: How was supervision throughout your involvement in the program? Was the workload manageable? Was there enough clarity around assessment processes? Were there enough feedback opportunities?
5. Tell us how your involvement in this program has supported your understanding of the role that speech pathologists can have in the community?
 - a. Prompts could include: Were you aware of any community-based speech pathology services before this experience? Did you learn of any inequalities in the community in relation to accessing services? How did this program support your engagement with the local community/your desire to become more engaged with your local community? How could this program be changed for future students to better support community engagement?
6. Tell us about any skills or knowledge that you gained from this service-learning experience that you may not have gained from a standard in-clinic placement.
 - a. Prompts could include: Experiences working directly with child educators. Experiences working to develop resources for the local community. Knowledge about the needs of the local community (i.e., what support to parents and ECEs require).

Section 3A Online Telehealth method for delivery of training – ONLY ASK IF TRAINING WAS DELIVERED VIA TELEHEALTH

Note to interviewer: This section is about understanding participants experience of delivering services using telehealth. This can be as conversational as possible.

7. I am wondering if you could tell me about your experience of delivering professional learning, demonstrating language techniques and providing feedback to educators and parents using telehealth?
8. To what extent did you regard the technical aspects of telehealth as adequate and acceptable when conducting these support services?

- a. Prompts could include: how was the sound and picture quality? Was it easy to build rapport with the participants? Were videos and resources able to be shared successfully using cloud storage and email communication?
9. How often were training sessions adversely affected by technological failure or problems?
 - a. Prompt: how many sessions were cancelled or affected? How many parents/ECEs struggles with technology demand?
10. How frequently were training sessions abandoned and rescheduled due to technological failure?
11. Was there adequate administration or operational support available for in your provision of speech pathology support services online?
12. Are there any improvements to the program that you would suggest?
 - a. Prompt: This could be course content or technological resources; is there anything that could be provided prior to the placement that would support you better though out the duration of your placement?
13. What feedback might be relevant when thinking about future students taking part in the MRFF placement?
14. What new skills/knowledge did you gain from delivering services via telehealth.
 - a. Prompts could include: To which online resources did parents, children, and/or ECEs respond best? Did you find any online teaching strategies to be particularly useful? How easy was it provide appropriate feedback to parents/ECEs via telehealth?

Section 3B Small group in-person workshop method for delivery of training – ONLY ASK IF TRAINING WAS DELIVERED IN PERSON

Note to interviewer: This section is about understanding participants experience of delivering services to small groups of educators from various centres. This can be as conversational as possible.

15. I am wondering if you could tell me about your experience of delivering professional learning, demonstrating language techniques and providing feedback to educators through a combination of small group interactive workshops and one-on-one site visits?
16. To what extent did you regard this format as adequate and acceptable for delivering these services?
 - a. Prompts could include: how was the quality of the training materials? Was it easy to build rapport with the educators? What was your experience of engaging in the small group practice sessions? Was the division of responsibilities between student SLP and CE logical and smooth?
17. How frequently were training sessions abandoned or rescheduled due to rostering, workload or personal factors influencing educator attendance?
18. Was there adequate administration or operational support available for you when preparing for and conducting your role in the training sessions?

19. Are there any improvements to the program that you would suggest?
 - a. Prompt: This could be course content or technological resources; is there anything that could be provided prior to the placement that would support you better though out the duration of your placement?
20. What feedback might be relevant when thinking about future students taking part in the MRFF placement?
21. What new skills/knowledge did you gain from delivering services during playgroups?
 - a. Prompts could include: To which resources did parents and children respond best? Did you find any teaching strategies to be particularly useful? How easy was it provide appropriate feedback to ECEs?

Section 3C Embedded coaching model of delivering training – ONLY ASK IF TRAINING WAS DELIVERED VIA EMBEDDING SPEECH PATHOLOGY SERVICES INTO THE CENTRE FOR REAL TIME COACHING AND DEMONSTRATION

Note to interviewer: This section is about understanding participants experience of undertaking training through a process of embedding speech pathology support, demonstrating and coaching into the centre's usual day to day routines. This can be as conversational as possible.

22. I am wondering if you could tell me about your experience of delivering professional learning, demonstrating language techniques and providing feedback to educators whilst embedded in the ECEC participating in the centre's daily routine?
23. To what extent did you regard this format as adequate and acceptable for delivering these services?
 - a. Prompts could include: how was the quality of the training materials? Was it easy to build rapport with educators and children? What was your experience of collaborative practice and embedded allied health support services to ECEs?
24. How frequently were visits abandoned or rescheduled due to rostering, workload or personal factors influencing attendance?
25. Was there adequate administration or operational support available for you when preparing and conducting these embedded support services?
26. Are there any improvements to the program that you would suggest?
 - b. Prompt: This could be course content or technological resources; is there anything that could be provided prior to the placement that would support you better though out the duration of your placement?
27. What feedback might be relevant when thinking about future students taking part in the MRFF placement?
28. What new skills/knowledge did you gain from delivering services during playgroups?
 - a. Prompts could include: To which resources did parents and children respond best? Did you find any teaching strategies to be particularly useful? How easy was it provide appropriate feedback to parents/ECEs?

Section 3D Playgroup model of delivering training – ONLY ASK IF TRAINING WAS DELIVERED DURING IN-PERSON PLAYGRUP SESSIONS

Note to interviewer: This section is about understanding participants experience of undertaking training and delivering services during in-person playgroup sessions. This can be as conversational as possible.

29. I am wondering if you could tell me about your experience of delivering professional learning, demonstrating language techniques and providing feedback to educators and parents during playgroup sessions?
30. To what extent did you regard this format as adequate and acceptable for delivering these services?
 - c. Prompts could include: how was the quality of the training materials? Was it easy to build rapport with educators, parents, and children? What was your experience of collaborative practice and embedded allied health support services to ECEs? What was your experience of providing direction and support to parents?
31. How frequently were visits abandoned or rescheduled due to rostering, workload or personal factors influencing attendance?
32. Was there adequate administration or operational support available for you when preparing and conducting these embedded support services?
33. Are there any improvements to the program that you would suggest?
 - d. Prompt: This could be course content or technological resources; is there anything that could be provided prior to the placement that would support you better though out the duration of your placement?
34. What feedback might be relevant when thinking about future students taking part in the MRFF placement?
35. What new skills/knowledge did you gain from delivering services during playgroups?
 - a. Prompts could include: To which resources did parents and children respond best? Did you find any teaching strategies to be particularly useful? How easy was it provide appropriate feedback to parents/ECEs?