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University Department of Rural Health

Impacts of a rural primary school embedded speech pathology program

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**Interim Report
2020**

What was the study about?

Allied health services are typically provided to primary school students within the Student Support Services (SSS) program, funded by the Victorian Government Department of Education. Within the SSS program, allied health professionals, such as speech pathologists, psychologists, and social workers, sit within regional, multi-disciplinary teams and support students at a number of schools on a visiting basis (State Government of Victoria, 2019). Some schools also purchase additional allied health services to students using a similar outreach service model to that reflected by SSS (Wakerman et al., 2008). Approaches that reflect an integrated service model (Wakerman et al., 2008), where schools directly employ and embed allied health professionals within the school setting, are not widely practised in Victoria.

In 2019, one rural primary school made the decision to employ a full-time speech pathologist as part of a pilot program, titled the *Embedded Speech Pathology Program*, to address the high speech and language support needs of the students. The school partnered with the University of Melbourne Department of Rural Health on the pilot program. Through this partnership, it was determined that the speech pathology position would also be used in a supervision capacity to support university speech pathology students to undertake a rural placement at the school. It was envisaged that the speech pathology students would provide much needed services to school students alongside the speech pathologist, and gain insight into service delivery in rural school settings during their time on placement. The embedded speech pathology program was intended to align to the Response to Intervention (RTI) framework. RTI first developed in the disability field during the 1960s and 70s, when knowledge about academic difficulties was growing. It re-emerged in the 2004 reauthorisation of the Individuals with Disabilities Education Act in the United States of America (Preston, Wood & Stecker, 2016). RTI is an education-based service model and has gradually made its way into Australian education systems, as illustrated in Queensland state government programs (Deloitte Access Economics, 2017). The RTI framework has a substantial empirical evidence base and has been promoted as a best practice model for speech pathologists working in education contexts by Speech Pathology Australia (2017). The RTI framework integrates assessment and intervention to maximise student achievement, and comprises three tiers of intervention: tier 1 – core classroom instruction, tier 2 – targeted small group instruction and tier 3 – intensive individual intervention (SPA, 2017, p. 22).

The embedded speech pathology program is being evaluated by researchers at the University of Melbourne, Department of Rural Health to support project leaders and project partners to enhance the program. In 2019, the University of Melbourne Department of Rural Health Human Ethics Advisory Group and the Victorian Department of Education approved the research (ID no. 1953902.1).

How was the study undertaken?

The evaluation project draws on action research principles (Greenwood & Levin, 2007) and data from a range of participants to determine the impact of an embedded speech pathology program (from here on called "the program") in a rural Victorian primary school. Data will be collected and analysed in two phases, and over a two-year period (2019—2020). Phase one of the evaluation project aimed to understand the initial impact of the program. This focused on the skills and knowledge of those involved with the program in implementing universal strategies that promote the speech and language development of students, as perceived by school staff and university students on placement at the school.

In 2019, school staff, including teachers, school leaders and the speech pathologist, and university students on placement at the school, were invited to participate in a face-to-face interview. Interviews were conducted with 11 participants between September and November 2019 at a time and place suitable to them. The interviews were recorded and transcribed, and all identifying information was removed from the transcripts. Drawing on framework analysis methods (Srivastava & Thomson, 2009) and conversations with school leaders, researchers developed a theoretical framework to guide thematic analysis of the data. Themes within the framework related to the program context, program activities, overall perspectives on the program, program successes and limitations, and strategies to improve the program. These findings are detailed below. To maintain participant anonymity, we refrained from labelling data excerpts by participant group.

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What did the study find?

Prior initiatives were not meeting student and teacher needs

Participants explained that prior to the implementation of the program, the school used a variety of approaches to build teacher capacity to develop the oral language skills of students. These approaches included a program focused on developing student literacy skills and the use of oral language skill testing. However, participants were unsure how or to what extent these programs, particularly the oral language skill testing, had informed strategies used by teachers or the broader school staff to improve student language skills. The school also supported SSS speech pathologist visits that resulted in therapy to individual students and some work to build the capacity of teachers to support students in the classroom. Some participants considered SSS speech pathologist visits valuable because the visiting health professionals would often conduct assessments and write reports that evidenced the complex support requirements of students. However, many participants felt these visits were unable to sufficiently meet the needs of the many students with speech and language difficulties:

"I think that everyone has tried to do their best but there definitely needed to be more done [for the students], particularly with speech [pathology]"

They'd [the visiting speech pathologists] give you some ideas to use but it's not as concentrated as having someone here all the time that can work with the kids.

Students experience disadvantage that impacts learning

Participants noted the disadvantages, including poverty, which many students faced in their day-to-day lives. Many participants felt that these disadvantages impacted their ability to develop speech, language, literacy, and social skills. Some participants noted that it was difficult to engage with some families about their child's educational support needs. A few participants suggested that some students may not have been exposed to literacy aids, such as books, in their home environment:

There's not as much support from home, so they're not really practising it outside of their one hour [speech pathology] session that they're doing in class.

A lot [of school students] come from backgrounds where books and literacy is not maybe a priority, or [not considered] a value resource.

Participants estimated that 50-to-90 per cent of students in the early years' cohort (Foundation to Grade 2) experienced speech and language difficulties. Many participants were concerned about how the speech and language difficulties demonstrated by students might impact their capacity to read and write:

"One of the first things we got the speechie to do was screen all the Prep [Foundation] kids - 20 out of 24 need[ed] speech therapy."

Lots of our kids can decode words, so they can just read the words but then they [have] really poor comprehension. … they're not linking [words] to meaning and a lot of it [is] because of their language deficit and their vocabulary deficit.

Many noted how some students with speech and language difficulties experienced social, emotional and behavioural challenges, and in-turn, found it difficult to participate and interact with others at school:

That's another big part of it, not being able to socialise with each other… so that impacts their play. …It's very, "this is mine", "this is yours", and there's not much communication. There's a lot of pushing and shoving because they don't know how to verbalise what they want to say a lot of the time.

Participants were concerned about the longer-term impacts of the disadvantage and speech and language difficulties experienced by some of the students they supported:

If they're [school students] not up to where they should be at the end of Grade 2, then they're probably going to struggle throughout their schooling.

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School staff capacity to address student communication difficulties varies

Many participants employed by the school felt they could confidently identify students with obvious speech and language difficulties. A few staff members felt they had a good working knowledge of the component parts of language development, and felt confident to embed opportunities to develop oral language into educational activities. However, many participants reported feeling less confident in their capacity to identify students with mild speech and language difficulties, and found it challenging to meet the varying communication support needs of these students. Some participants mentioned that undergraduate teacher training inadequately prepared teachers to support students with speech and language difficulties:

> We're trying to teach these kids all the different [language] concepts. It's just massive and you don't appreciate it until you actually see what the speechies do and what they know, and you go, 'Oh, my God, every teacher should be taught like this.'

> I think it depends from teacher to teacher, in terms of what previous experience they've had with a speech pathologist. …Maybe their experience was interaction with their kids in their class who had a speech difficulty and couldn't say a particular sound, rather than working on an oral language or literacy focus.

The program offers a variety of supports

Participants described the different components of the program, and how they operated in day-to-day practice. Some participants noted that the implementation of the program had broadly followed initial program ideas, which was to work collaboratively with school staff to support students with speech and language difficulties, and to focus on the early year levels. Many discussed the comprehensive nature of the speech pathologist's role, which involved collaborating with early year level teachers to co-plan lessons, conducting language and spelling screening with school students, facilitating professional development sessions for teachers, whole-class oral language sessions and small group activities for students in the classroom, providing speech pathology resources for teachers, and supervising university students on placement. Some participants also noted the speech pathologist had developed program resources for future use, including an oral language scope and sequence[1] and a unit plan incorporating whole-class lesson plans for teachers. Participants reported that university students had a slightly more limited role, which involved providing assessment and therapy sessions to individual school students, facilitating small group classroom activities, and conducting screening activities:

"The speech pathologist tries to make sure [they are] linking [the therapeutic approach] back to what everyone else in the class is doing, so the kids don't actually feel like they're missing out on all these opportunities."

> [The speech pathologist] would join in on the [teacher] planning once a week… [They] didn't just come and say 'this is what we're doing'. [It] really meshed all [the] lessons together.

> We had [university] students going into classrooms…a few times a week and looking at phonological awareness, blending, segmented words, just to help with [the school students] developing their reading and spelling skills.

Positive aspects of the program

Participants spoke about the aspects of the program that were working well. Overall, participants felt privileged to have the program at the school. Many felt the program uniquely focused on building the capacity of school staff, particularly teacher capacity, and supporting school students in a flexible manner. Many participants described the

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[1] A scope and sequence is a summary of what is to be taught, the sequence in which it will be taught and the syllabus outcomes to be addressed. Scope and sequences are flexible documents and provide a brief overview of the key concepts and ideas for an individual stage or year (see NSW Government, 2019, https://educationstandards.nsw.edu.au/wps/portal/nesa-k-10/understanding-the-curriculum/programming/advice-on-scope-and-sequences)

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ongoing, embedded presence of the speech pathologist and university students as being a significant benefit for school staff and students:

> Just having someone there every day, you know, that staff can talk to, that kids get to see every day—[the speech pathologist] is able to follow up with certain kids weekly, rather than…twice a term.

While many participants felt privileged to have the program, some participants also noted that the significant student need for services warranted such a program. This was nicely phrased by one participant as an "essential luxury":

> I want to say how lucky we are to have [the speech pathologist] in the school … because we're a disadvantaged school and they [the school students] come disadvantaged in language and experiences.

"They [school students] love the speech pathologist coming in. They enjoy it and they enjoy [the speech pathologist's] work."

Many participants commented that the school students enjoyed the different components of the program, particularly the whole-class sessions and small group classroom activities facilitated by the speech pathologist and university students. A few participants reported that school students were mostly happy to participate in individual therapy sessions because these sessions were not viewed negatively by the student cohort. They attributed the school students' positive view of the program in part to the rapport that school students had developed over time with the speech pathologist and university students:

> I think they [school students] actually really enjoy it. It's like a treat when [the speech pathologist] comes in once a week. They [school students] see it as a positive experience, but they don't realise they're actually learning or developing their speech skills, but it's fun and it's something they look forward to.

Participants reported that the program benefited school staff. In particular, participants noted that having the speech pathologist and university students facilitating classroom sessions and providing individual therapy sessions to school students lifted some of the pressure on them to meet the students' diverse learning support needs. Participants also noted the value in planning and collaborating with the speech pathologist to link individual therapy, small group and whole-class sessions into the curriculum and into lesson planning. In particular, they explained that there were many benefits from the speech pathologist illustrating different whole-class approaches in classrooms and providing school staff with feedback. This included the trialling of new ideas by school staff, and for some, motivation to learn more about speech pathology theory and practice in order to make better use of the speech pathologist:

> I think watching [the speech pathologist] model to a whole class has been great… some of the ideas that [they've] had, have been really terrific too.

> Since the speech pathologist started [they have] given us plenty of ideas and [I have] been able to run sessions …[and] can now go 'right, well now I know how to target this area' or whatever it might be. And it gives you those tools and skills and ideas as well … not to mention the actual one-on-one time they [the school students] can get with [the speech pathologist] as well.

The presence of the university students was viewed as a "bonus" for school staff who were expected to meet a broad range of student support needs. University students provided "more hands on deck", meaning that some school students received more frequent support in classroom settings or additional individual sessions than what was able to be provided by the speech pathologist: "I really do think that's terrific… We have got a lot of needy kids, and there's just not enough people [health professionals] to cover them all the time, so having the [university] students come in and do that has been great." In addition, some participants noted that the resources developed for school staff were useful, for example, the development of simple visual cues for school students struggling with reading particular vowel sounds.

"I think the [university] students are great; having the students in it's just a bonus."

Participants valued the specialist knowledge held by the speech pathologist and noted that teachers had started to approach the speech pathologist and university students for further information and resources. A few participants mentioned the usefulness of the reports written by the speech pathologist and university students:

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[The speech pathologist] writes out a little report after each session with the children and it's quite detailed and these reports go home to the parents with something that they can do at home… and they're really beneficial.

University students were also learning from their experiences in a rural school context. A few participants considered the development of student knowledge as an important process to enable them to work in education contexts in the future:

I think that you probably need to upskill the [university] students because I'd like to think, in 10 or 20 years, that a lot–if not all schools–will probably have a speech therapist working for them.

Overall, participants reported that the program provided a good level of service, considering the extent of support required by school students. A few participants noted that some school students involved in the program had shown improvements in literacy skills and many had retained literacy concepts provided through the program:

I have noticed that a lot of kids are sounding out (words) and I think anecdotally that's as a result of the [university] students this year and their activities, so I think that's [an indicator of program] success.

[School] students have definitely learnt in terms of their language skills and are getting a little bit better progressively, throughout the time [of the program]. And they're willing to have a go.

Limitations to the program

Most participants demonstrated awareness that the program was in its first year and understood that the program would require further adaptations to achieve its aim to address the high speech and language support needs of students. Given this, many felt it was too early to tell if the program had impacted school students:

I can't honestly say if there have been massive changes [as a result of the program] but I definitely think it's helping to progress them [school students] along.

Many participants noted that the disruptive behaviours of some students impacted on the effectiveness of the program. However, a few participants noted that the speech pathologist had addressed the challenges presented by school students through adapting the delivery of whole-class lesson content:

With the big class [speech pathology-led] sessions, a lot of it…is speaking and listening and the attention span of the kids isn't great so when they've got to sit on the floor and listen or do an activity where they've got to be really engaged, you lose so many of them.

It's a hard school and these kids are tough. I've seen the speech pathologist really step it up… learn on the way. It's hard to get up there, but [the speech pathologist] is really doing wonders.

Some participants identified limiting aspects relating to the program model itself. It was noted that the embedded program model, which required the speech pathologist to be a school employee, potentially resulted in them working in isolation, rather than with other allied health professionals. Some participants reported that the limited communication between program stakeholders at times reflected a lack of emphasis on collaboration in the program model. These participants highlighted the lack of communication with the broader school staff cohort regarding information about the program's scope and university student placement dates. Some expressed having limited knowledge on how the program was expected to operate and what to expect from it. However, some participants noted that communication was the responsibility of all stakeholders involved in the program. These participants acknowledged that school staff did not always approach the speech pathologist to discuss components of the program, or read the reports written by the speech pathologist and university students. Despite this, some participants felt that limited communication had led to the program's implementation being somewhat disjointed:

So [the] speech pathologist was really doing [their] thing and I was sort of doing my thing… I would see [them] going past and hear what [they were] doing and I thought it was all good and everything, but we only really started working together, almost by accident.

I always get the speech reports from [the speech pathologist]. Whether I read them and implement them, that's on me and not on [them].

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Ideas to improve the program

Many participants saw the program as having great potential for meeting the speech and language needs of students at the school: "I definitely think it's a better [and] new approach, but I think we've got to build on that more." Participants offered a number of ideas for improving the program. Many suggested that the program could provide additional services and be expanded so that speech pathology knowledge is "infiltrated across all the [school] layers [levels]", rather than only being focused on the early year levels. Other participants suggested the program be expanded to provide additional teacher professional development opportunities, whole-class interventions, and individual student therapy. One participant noted that the program could trial the provision of individual supports in the classroom, rather than in a separate room:

> I think the kids needed more than 15 minutes [of therapy] a week. If you're getting 15 minutes that's good, but I feel 15 minutes three times a week would be more valuable.

> If there was a [school] student that was really struggling and [the speech pathology team] wanted to come in and see how they [the student is] in a classroom, as opposed to [in] just another one-on-one session, and see if there was anything that could be done differently, I think that would be beneficial.

However, many participants argued that the program required stronger planning and monitoring tools to underpin its expansion in the second year of implementation. A few participants suggested that clear performance and outcome measures be developed, so that program successes could be more readily determined:

> How do you measure it [the program]? How do you say if this has been successful? And at this early stage it is hard … to quantify that.

Beyond broadening the program's focus to all year levels and increasing the amount of whole classroom and individual service provision, participants suggested the program needed to have an increased emphasis on collaboration and communication between the different program stakeholders. In particular, a few participants suggested that the speech pathologist, university students, and teachers and education support staff could work more closely on lesson planning. Others proposed that school staff could benefit from meeting regularly with the speech pathologist or university students to talk about the school student support strategies as captured in written reports:

> The main thing I can see [to improve] is the collaborative element… [The speech pathologist] could be planning with each section of the school, so [they are] totally focussed on what we're doing and what the [student and staff support] needs are.

> You get the report but it's only a quick, 'let's quickly read over it [situation].' Whereas I think it needs to be probably, 'let's sit down together and go through it [the report] together'… It's better to come from the professional who understands it and [let them] explain it to you in a way [where] you definitely are going to know what they're meaning behind it.

Many participants suggested that the program's aims and components need to be clearly communicated with school staff, particularly regarding information about day-to-day program operations, university student placement dates, and the role of university students within the program. A few participants suggested that increased engagement between the speech pathologist, university students and those in school leadership roles could potentially increase the speech pathology knowledge held by school leaders and ensure future program planning is developed from their understanding of day-to-day program operations. One participant explained that this engagement could be conducted in a range of ways, including via observation of the program in practice:

> One thing I would like is maybe get the leadership to… watch more of the sessions themselves. …even if it's just twice a term or once a term…I think that might be helpful for the leadership to know exactly what's happening in the classroom.

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Discussion

Phase one of the evaluation project aimed to understand the initial impact of the embedded speech pathology program on the skills and knowledge of those involved in implementing strategies that promote the speech and language development of students at a rural primary school. The findings of this study indicate that prior allied health initiatives have not adequately met teacher support needs or the speech and language needs of school students, many of whom experience socio-economic disadvantage. The findings show that school staff and university students on placement at the school held broad consensus that the program offered a variety of supports to school staff and students, and incorporated a number of positive aspects, including perceptions that the school students positively responded to speech pathology interventions offered through the program. The findings also demonstrate some program limitations, which are indicative of a program in the early stages of development, and describe a number of strategies to improve the program.

A major finding from the study was that, overall, participants saw value in the program. In particular, participants found the embedded nature and presence of the speech pathologist and university students beneficial, due to the alignment of speech pathology interventions with the school curriculum, as well as the increased access to services. Many participants highlighted, discussed and evaluated different components of the program. This included the types of interventions and education provided by the speech pathology team as well as the frequency and quality of service provision. The findings suggest the program *did* provide interventions across the three tiers of the RTI framework as described by SPA (2017): it offered universal supports consistent with tier 1, such as professional development and collaborating with teachers on whole class activities; frequent targeted supports consistent with tier 2, such as conducting speech and language screening and developing small group activities; and frequent intensive interventions consistent with tier 3, such as individual student assessments and interventions. Importantly, the findings demonstrate how the embedded nature of the program also allowed the speech pathology team to work in an integrated way across the RTI tiers. For example, by transferring knowledge developed during individual student service provision (tier 3), this knowledge was used to build the capacity of school staff (tier 1). While the findings suggest tier 2 and 3 interventions are occurring frequently, tier 1 interventions could be more comprehensive and targeted. For example, in addition to whole-class sessions and lesson planning, tier 1 interventions could include the promotion of and training for an evidence-based approach to literacy instruction (such as systematic synthetic phonics), whole-school and whole-class communication strategies as well as classroom-based coaching and support, as suggested by SPA (2017). These interventions may go some way to ensure school staff have the opportunity to increase their language and literacy knowledge, which has been shown to vary in Victorian educational contexts (Stark et al 2016).

This concept of collaboration was one aspect of the program that participants discussed extensively. Some participants spoke about the benefits that school staff and students gained from working with the speech pathology team to develop and coordinate lesson plans for whole-class language sessions, small group activities and individual sessions. Most participants indicated a positive attitude towards collaborating, with several recommending that more collaboration should occur via joint lesson planning, co-teaching in the classroom and combining professional development sessions delivered by a teacher and the speech pathologist. The efforts made by the speech pathologist to answer questions or problem solve with school staff were also noted, although the findings also suggest that some school staff were hesitant to approach the speech pathology team for support or felt unsure of how to utilise them. Hernandez (2013) reviewed the literature on the enablers and obstacles to establishing and maintaining productive collaboration in educational settings. His findings reflect those of Snow (2016), and indicate that the differing training provided to teachers and speech pathologists results in differences in knowledge that can challenge collaboration between the professions. To overcome this, teachers and speech pathologists may need to learn about each other's discipline through direct interaction (Hernandez, 2013). In this school setting, inter-professional knowledge development is partially achieved through the speech pathologist's involvement in classrooms and lesson planning with teachers. However, collaboration could be further bolstered by teachers learning more about the speech pathology profession, possibly through observing individual speech pathology sessions and doing/receiving some additional training. On the other hand, speech pathology team members could learn more about the teaching profession by teachers providing them with feedback and mentoring regarding their delivery of whole classroom activities. Bonati (2018) explained that within collaborative planning in educational contexts, team members need to communicate and clarify their roles, responsibilities, and expectations. For this program, providing opportunities for school staff and the speech pathology team to do this, particularly regarding speech pathology reports and university

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student focus areas, would be beneficial. This could be achieved primarily through the development of an annual program plan with clear outcome and impact measures, including related responsibilities, as highlighted by participants.

The findings indicated that family members of the school students had limited involvement in the program, beyond being provided speech pathology reports regarding their children. Many participants noted the socio-economic disadvantage experienced by school students and their families, and demonstrated concern about the potential impact of this disadvantage on the capacity of families to support students to develop language and literacy skills at home. However, families should be part of the team that surrounds a child with speech and language difficulties (SPA, 2017), because family interactions and the home literacy environment have a strong influence on children's speech, language and literacy skills (Payne, Whitehurst & Angell, 1994). Community participation in the form of parental education, such as family literacy programs, empowers parents to support their children and provides an opportunity to speak out about their children's learning and development (Diez, Gatt & Racionero, 2011). Involving families is, of course, made difficult when speech pathology services are provided within the school setting, and delivered to students without parental attendance. Whilst there is no simple solution for effective family involvement, the speech pathology program could make small steps in the next phase of the program to more actively engage families in their children's speech pathology journey. For example, families could be invited to observe their child receive individual therapy, attend meetings to discuss therapy plans, or observe in class while teachers or the speech pathology team read books with their children. Further research into this specific area could be of benefit to the school, students and families in fostering more genuine partnerships.

Overall, the findings of this study indicate that the program is having a broadly positive impact on both school staff and students, as well as benefiting university students' learning. Whilst there are adaptations required to make the program more effective and impactful, there is good evidence for the program to continue.

Strengths and limitations of the study

Phase one of this study has provided important insight into the initial impacts of the embedded speech pathology program, as perceived by those experiencing it. It highlighted that the program so far, has offered valuable support to school staff and services to students experiencing communication difficulties. It has also provided suggestions to improve the program. However, this study comprised a small participant sample from one rural primary school and use of the data was limited to protect the anonymity of participants. This study only captured data at one point in phase 1 of the program, which meant that it was difficult to identify changes over the program's first year of implementation. The questions used by researchers to interview participants involved complex concepts about speech pathology provision in education settings. This may have limited the extent to which some participants were able to engage in a conversation about the program during the interview. The second phase of the research could consider building stakeholders' basic knowledge of speech pathology concepts prior to collecting data, and adapting the interview questions to ensure they support participants to confidently discuss their experiences of the program.

The action research principles underpinning this study will allow researchers to further adapt the focus of the research to reflect what is required by the school. However, the use of these principles has also posed several challenges for researchers. It has been difficult for those holding dual roles in the speech pathology program and research study, particularly when collecting and analysing empirical data. The use of action research principles places importance on ensuring a prompt turn around between data collection, analysis and report writing, to ensure the study findings can inform future program planning. Complexities with juggling dual roles and project timelines are common experiences within studies underpinned with action research principles (Greenwood & Levin, 2007). Future research on the program could consider drawing on additional resources to carry out time-consuming research activities, to ensure researchers with dual roles are able to focus on implementing program evaluation findings and development. The research questions and methods adopted to answer these questions in future research on the program need to reflect the changing research requirements and consider the perceptions of school leaders, and other stakeholders. This could include the use a variety of data collection methods to continue to explore the impact on school staffs' capacity to implement strategies that promote the speech and language development of students. Further research could also look to capture the impact of the program on the speech and language development of school students from the family perspective.

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Recommendations

Based on the study's findings, the following recommendations are provided:

1. That the embedded speech pathology program be **expanded** into other primary school year levels, and to incorporate other tier 1 levels of intervention in areas such as evidence-based literacy approaches, whole-school and whole-class communication strategies and teacher coaching, with aligned resources. That planning to expand the speech pathology team reach beyond the school is considered during 2020.

2. That the embedded speech pathology program **develops a resource base**, including the development of an **annual program plan**, that clearly outlines the key objectives and actions to be undertaken and identifies appropriate outcome and impact measures. Resources that build on the oral language scope and sequence and whole class session plan documents could include a **speech pathology program manual** that is provided to new and existing staff. The manual should outline the role and scope of practice of speech pathology and provide basic information about speech and language development and the links to literacy skills, as well as student developmental milestones and red flags for referral. Fact sheets and customised reporting templates may also be considered for use with staff and families.

3. That the **capacity and knowledge of school staff is further developed** so they can adopt speech pathology service concepts in day-to-day teaching and other school practices. Capacity building may be achieved by encouraging school staff to participate in literacy groups and professional development sessions on speech pathology, and via **increased collaboration** with the speech pathology team through lesson planning and co-teaching in the classroom. Peer feedback processes that are already used between teachers may be a useful strategy for mutual growth and skill development between school staff and the speech pathology team.

4. That **family engagement is prioritised** in the second year of the speech pathology program. This could include involving families in the therapy processes, by inviting them to attend sessions and/or participating in meetings about their child's progress; running family information sessions regarding the speech pathology program and tips for supporting children's language and literacy development at home; developing initiatives that support families to grow their skills and knowledge in regards to language and literacy (e.g. shared reading opportunities in the classroom, adult literacy support).

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Thank you for participating and sharing your experiences with us

For more information about this study or a copy of the full report, please contact Claire Salter via email: claire.salter@unimelb.edu.au or telephone: 03 5823 4573.

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