Improving children’s reading through peer support:
The student2student program

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Improving children's reading through peer support:
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Improving children’s reading through peer support:
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Executive summary

The importance of literacy

Historically, literacy has been defined as the ability to read and write text. However, its meaning in the information-rich twenty-first century continues to evolve. Adult literacy is the ability to understand, evaluate, use and engage with written texts to participate in society, achieve one’s goals, and develop one’s knowledge and potential. Literacy is a prerequisite for Australians being able to participate economically, socially, culturally and politically, with a basic level of literacy no longer sufficient for such participation.

Literacy skills are central to an individual’s employment prospects, the ability to manage one’s health, be an informed consumer and an active citizen. Without solid literacy skills, it is very difficult to achieve technological literacy, and governments and businesses are increasingly using digital platforms to provide a range of services.

People with low literacy skills are less likely to complete school, more likely to be unemployed and on social security, as well as more likely to experience poor health. Children of adults with poor literacy are also more likely to struggle with literacy themselves and are less likely to do well in school.

Australia’s reading challenge

Across various ages of the Australian population, significantly more needs to be done to lift reading skills, particularly with respect to children and young people:

- One in five Australian children in their first year at school do not have most of the basic literacy skills necessary for school.
- At least one in ten students of low socio-economic backgrounds in Years 3, 5, 7 and 9 do not meet the minimum reading standard on NAPLAN.
- Australia’s average reading score for Year 4 students is significantly lower than the average score for 21 other countries, including England and the United States.
- More than 40 percent of adult Australians have literacy skills below the minimum skill level required to cope with the demands of a modern society.

Improving children’s reading

There are a range of factors which are important in supporting children’s improved reading. Parents and carers’ attitudes and literacy practices from the early years right through primary and secondary school are significant. Practice and motivation are also important in becoming a better reader. Children who like to read, read more and because they read more, their reading is better. Poor readers – those most likely to benefit from regular practice – are often unmotivated to read.

Interventions aimed at improving children’s reading need to combine motivation building techniques with skills building strategies.

For readers who have struggled for years, literacy tutoring interventions are most effective when a personalised and responsive relationship-based approach to reading is combined with student choice of interesting and appropriate material. There is considerable evidence on the effectiveness of trained peer tutors in programs aiming to support children with reading difficulties. The one-on-one nature of peer tutoring contributes to increasing the student’s engagement as well as maintaining their attention to the text for longer periods of time.

Trained tutors are more effective than untrained tutors and one-on-one is more effective than group tutoring. Well-trained tutors are particularly effective at improving students’ confidence, and encouraging them to participate, solve problems, use a range of reading strategies and develop independence. Providing tutors with a range of resources, ongoing assistance and regular feedback are important if tutoring is to be successful. Providing tutoring over the phone significantly increases the number of students who can be supported.

The Smith Family and young people’s reading

The Smith Family has a long history of implementing programs which aim to enhance the literacy skills of children and young people. Since 2004, it has been involved with the Let’s Read program in disadvantaged communities across Australia. Let’s Read focuses on developing early literacy skills and provides parents and carers with reading books and support to encourage them to read with their young children.
In the late 1990s, The Smith Family identified that many of the families it was supporting were highly mobile and many of the children in these families were struggling to achieve at school. In response, The Smith Family aimed to develop an effective and economically viable method for tutoring students with poor reading skills, with the Study Support Project first piloted in 1997.

Since around 2000 The Smith Family has been implementing the student2student program. It involves students from Years 3 to 8 who have a reading age up to two years behind their chronological age. It matches them with trained reading buddies who are at least two years older. Student2student runs over an 18 week period with the pair connecting over the phone two to three times a week, for at least 20 minutes at a time. The student reads to their buddy over the phone from books provided by The Smith Family which are appropriate to the student’s reading level. Participation is in addition to any literacy support they might receive at school, so extends the amount of reinforced reading time that students complete. In 2010, with the support of Optus, The Smith Family introduced a mobile phone model of the program in response to the growing number of families who did not have a home landline.

Program results for 2012

Since the commencement of student2student, outcomes data for program participants has been collected and analysed. As part of the ongoing process of evaluation and continuous improvement, a more detailed analysis of the 2012 student2student data was conducted in 2013. This included pre and post program reading test scores for 742 participants and surveys completed by students, their parents/carers and buddies.

Prior to commencing the program:

- 42.5 percent of participants had reading abilities that were more than two years behind their chronological age
- 29.8 percent had reading abilities that were between one and two years behind
- 26.0 percent had reading abilities that were between one and 12 months behind
- For 1.6 percent of students, their reading age was the same as their chronological age.

Older students tended to be further behind in their reading than young students, with a third of 13 to 15 year olds being between four and seven years behind their chronological age compared with none of the students aged between 7 and 10 years. This reinforces the importance of early intervention.

Students from 75 communities across every state and territory and including metro, regional and rural areas participated in the program. Nine percent of students were from Aboriginal and Torres Strait Islander backgrounds and a similar proportion were from non-English speaking backgrounds. About a third of participants used the mobile phone form of the program with the other two-thirds using a landline.
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At the completion of the 2012 student2student program, more than nine out of 10 students (93%) showed an increase in their reading age relative to the start of the program, with around two thirds (64%) improving by more than six months. Across students of Aboriginal and Torres Strait Islander backgrounds, those from English speaking backgrounds as well as those from non-English speaking backgrounds, at least nine in ten students improved their reading over the course of the program. Similarly, nine out of ten students who participated using either a landline or mobile phone improved their reading age.

Forty five percent of students who were up to 12 months behind in their reading prior to the program reached or exceeded their chronological age by the end of the program.

Students indicated at the end of the program that the best things about student2student were:
- Reading and talking over the phone with their buddy
- Improving their reading and confidence
- The quality of the books they received.

The two most common responses buddies gave about the best thing about student2student were:
- Seeing an improvement in their student’s reading and/or confidence
- Being able to help someone.

At the end of the program, around nine out 10 of students agreed that:
- They had enjoyed participating in student2student (94%)
- Their reading had improved (91%)
- They would tell other young people to be involved in student2student (87%).

Eight out of 10 students agreed that:
- They were reading more at the end of the program than when they had started (83%)
- The reading they did through the program made it easier for them to do their school work (81%)
- The program helped them feel better about school (81%).

In addition, around nine out of 10 parents/carers agreed that:
- Their child's reading had improved (94%)
- The program had helped their child feel better about themselves (92%)
- They would tell other young people and families to be involved in student2student (95%).

Conclusion

Research highlights the importance of providing additional support to children and young people who are struggling with reading, particularly before they fall too far behind. Literacy skills are pivotal to a child’s capacity and motivation to engage in education and learning.

Since 1997 and in response to a significant need for extra-curricular reading support programs, The Smith Family has offered an effective and economically viable method for tutoring students with poor reading skills.

The positive benefits of the program are apparent in both objective reading test scores and in self-reported perceptions from students about the advantages of participating in the program. Importantly, at the completion of the program, students recognise that their reading skills have increased, that they are reading more and that their improved skills are assisting them with their school work. These outcomes are confirmed by the parents/carers of the children and young people who take part in the program.

In addition, the program has positive outcomes for the young people who take on peer-mentoring roles as reading buddies. These young people gain a high degree of satisfaction in seeing their student's reading levels improve and in being able to help someone else to gain an appreciation in and confidence for reading.

As well as being effective, student2student is cost effective, with the organisational costs associated with the program equating to just over $1,100 per student. These costs relate to program coordination, the recruitment of volunteer buddies and supervisors and direct costs associated with the provision of books to students and their mentor buddies. These costs, however, are complemented by the significant time and effort that is generously provided by the volunteer buddies and supervisors. In addition, the success of this program is also dependent on The Smith Family’s capacity to coordinate the large-scale delivery of such a program and to leverage key support from corporate partners, such as Optus, so as to ensure that approximately 1,000 students a year benefit.
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1. The importance of literacy

Defining literacy in the 21st century

Historically, literacy has been defined as the ability to read and write text. However, its meaning in the information-rich twenty first century continues to evolve. Reflecting this, the Organisation for Economic Development and Co-operation (OECD) now defines adult literacy as the ability to understand, evaluate, use and engage with written texts to participate in society, achieve one’s goals, and develop one’s knowledge and potential (OECD, 2013). Literacy is a prerequisite for Australians being able to participate economically, socially, culturally and politically, with a basic level of literacy no longer sufficient for such participation.

Literacy and participation

Literacy skills are central to an individual’s employment prospects, with workplaces now even more literacy-dependent than in the past. The current and predicted future employment markets have fewer low skilled jobs and an increasing emphasis on knowledge, innovation and workplace safety. Better skills and more education are now demanded, with literacy the avenue for both (European Union, 2012).

An individual’s ability to manage their health, be an informed consumer and an active citizen, all rely on them having good literacy skills. Without solid literacy skills it is also very difficult to achieve technological literacy (Cree et al, 2012). The internet for example, requires users to have a greater ability to evaluate and extract information from a range of sources (European Union, 2012). Governments are increasingly using digital platforms to provide a range of services to the community, as are many businesses. Individuals without strong literacy skills are now unable to participate in many dimensions of society.

The benefits of improved literacy

For an individual, improved literacy leads to better educational and employment opportunities and higher earnings; it increases confidence, improves health and enhances social and civic participation. The OECD’s 2012 Survey of Adult Skills, showed that the median hourly wage of workers who scored at the top literacy levels (Level 4 or 5) was more than 60% higher than for workers scoring at the lowest levels (Level 1 or below) (OECD, 2013). The benefits of strong literacy skills accrue not only to individuals, but also to their families, communities and nation. There is a strong correlation between good literacy and strong economic growth (European Union, 2012).

Conversely, people with low literacy skills are less likely to complete school or transition into paid employment, and are more likely to be on social security and experience poor health. Adults with low literacy skills are almost twice as likely to be unemployed (OECD, 2013) and in Australia, as in most OECD nations, the probability of being unemployed decreases as literacy scores increase (OECD, 2000).

The impacts of poor literacy can also be felt in subsequent generations. Children of adults with poor literacy are more likely to struggle with literacy themselves and are less likely to do well in school (European Union, 2012).

Individuals with lower literacy proficiency are more likely than those with better literacy skills, to believe they have little impact on political processes. They are also less likely to participate in volunteer or association activities. In most countries that participated in the Survey of Adult Skills, those with lower literacy skills also tended to be less likely to trust others (OECD, 2013).

So the impact of poor literacy is felt in multiple ways and that impact is costly. It has been estimated that poor literacy costs Australia $18.35 billion (Cree et al, 2012)1.

1 This report uses a formula for calculating the economic impact of illiteracy developed by the United Nations Educational, Scientific and Cultural Organisation (UNESCO). It assumes the costs of illiteracy in developed nations like Australia is 2% of Gross Domestic Product.

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Given the significance of literacy, both to individuals and the nation, the reading skills of Australia’s population across all ages is critical, and there are now a range of measures which allow assessments in this area to be made.

The reading skills of children starting school

The Australia Early Development Index (AEDI) assesses children in their first year of school in five areas that are linked to predictors of good health, education, and social outcomes (Australian Government, 2013). One of these areas is the language and cognitive skills that are necessary for school. Children who are assessed as developmentally vulnerable in this area do not have most of the basic literacy skills, have problems with identifying letters and may not show any interest in books. Table 1 shows that in 2012, close to one in five (17.4%) children in their first year at school were not on track in the development of their language and cognitive skills. For Indigenous children the figure was two in five (41.9%).

The reading skills of school students

The reading skills of Australian school students are assessed nationally in Years 3, 5, 7 and 9 through the National Assessment Program – Literacy and Numeracy (NAPLAN). Table 2 shows the proportion of students in those years, who did not meet the relevant national minimum standard for reading in 2012. It also includes data for students of Aboriginal and Torres Strait Islander backgrounds and students whose parents’ highest level of education was Year 11 or below, a measure of low socio-economic background.

In all year levels there are proportions of Australian students who are not achieving even the minimum national reading standard. This is particularly the case for those from Aboriginal or Torres Strait Islander backgrounds and to a lesser extent, those from a low socio-economic background. Approximately, one in four Aboriginal and Torres Strait Islander students at each year level did not meet the national minimum standard, rising to one in three in Year 5. At least one in 10 students of a low socio-economic background in all four year levels, also did not meet the minimum standard.

The reading performance of Australian students in Year 4 is also internationally benchmarked through the Progress in International Reading Literacy Study (PIRLS). Hong Kong, Finland, the Russian Federation and Singapore were the top-performing countries on PIRLS in 2011. Australia’s average student performance on reading literacy was significantly lower than the average performance of 21 other countries, including England and the United States (Thomson et al, 2012). PIRLS data shows that Australia has a substantial ‘tail’ of underperformance in reading, with 17 percent of students achieving at the ‘low’ international benchmark and seven percent achieving below this level (Thomson et al, 2012).

Table 1: AEDI results for language and cognitive skills, 2012

<table>
<thead>
<tr>
<th></th>
<th>Developmentally vulnerable (%)</th>
<th>Developmentally at risk (%)</th>
<th>On track (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>6.8</td>
<td>10.6</td>
<td>82.6</td>
</tr>
<tr>
<td>Indigenous</td>
<td>22.4</td>
<td>19.5</td>
<td>58.0</td>
</tr>
<tr>
<td>Non-Indigenous</td>
<td>5.9</td>
<td>10.1</td>
<td>83.9</td>
</tr>
</tbody>
</table>

Note: Figures may not add up to 100% due to rounding.

2 Below the 10th percentile  
3 Between the 10th and 25th percentile  
4 Above the 25th percentile
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Table 2: Percentage of students below national minimum reading standards, NAPLAN 2012

<table>
<thead>
<tr>
<th></th>
<th>All students (%)</th>
<th>Students from Aboriginal or Torres Strait Islander backgrounds (%)</th>
<th>Students whose parents’ highest education was Year 11 or below* (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 3</td>
<td>4.4</td>
<td>23.0</td>
<td>11.5</td>
</tr>
<tr>
<td>Year 5</td>
<td>6.4</td>
<td>32.4</td>
<td>15.0</td>
</tr>
<tr>
<td>Year 7</td>
<td>4.3</td>
<td>22.3</td>
<td>10.3</td>
</tr>
<tr>
<td>Year 9</td>
<td>7.0</td>
<td>30.1</td>
<td>15.6</td>
</tr>
</tbody>
</table>

Source: ACARA, 2012
* A measure of low socio-economic background

The literacy skills of adults

In the OECD’s Survey of Adult Skills (OECD, 2013), Australia was the fourth ranked nation on literacy proficiency, but as with almost all other countries participating in the survey, the literacy skills of one in ten Australians was only at or below Level 1. Perhaps more significantly, given the increased literacy demands of a knowledge economy, more than 40 percent of Australians were found to have literacy skills below level 3 (Australian Industry Group, 2013), which is considered by the OECD to be the minimum skill level required to cope with the demands of a modern society (OECD, 2010).

The above data from across various ages of the Australian population, highlights that significantly more needs to be done to lift reading skills. In particular, early intervention with respect to improving the reading skills of children and young people, will assist to circumvent future adult literacy problems.

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5 Assessment is of those aged 15 to 74 years.
6 The survey measures participants’ skills in literacy with Level 5 being the most advanced level.
3. Improving children’s reading

There is a vast body of evidence on how to improve children’s reading skills, some of which is summarised in this section.

Parents’ attitudes and literacy practices
Parents and carers are children’s first literacy teachers, and their attitudes and literacy practices have a very significant influence on their children’s literacy development, from the early years and all the way through primary and secondary school (European Union, 2012). Supporting parents and carers to engage positively with their children around reading is therefore critical.

Frequency of reading and motivation
Research shows that practice is important in becoming a better reader. Good readers read approximately five times as many minutes per day as average readers and nearly 200 times as much as poor readers (Anderson et al cited in Quirk et al, 2009). Importantly, given sufficient print resources, how often a child reads is explained by two factors – their initial success in acquiring reading skills and their motivation (Morgan and Fuchs, 2007).

Motivation and competence go hand in hand – children who like to read, read more and because they read more, their reading is better. This in turn leads to them enjoying reading more (European Union, 2012). Motivated readers also tend to choose more challenging reading materials, persevere when reading is difficult, cognitively process reading materials more deeply and comprehend them better (Morgan and Fuchs, 2007).

Conversely, poor readers – those most likely to benefit from regular practice – are understandably, often unmotivated to read. Children lose motivation to read because of their repeated failure to acquire the required skills, and with the loss of motivation they tend to read less, leading them to fall further behind. Low motivation therefore tends to be both a consequence of limited skills acquisition as well as a cause of later reading failure (Morgan and Fuchs, 2007).

Children with poor reading fluency develop negative ideas of their reading skills and capabilities as early as the second year of school, and these negative self-concepts can ultimately impede them from developing better reading fluency later (Quirk et al, 2009).

Given the relationship between motivation and children acquiring reading skills, Morgan and Fuchs (2007) concluded that interventions focusing on bolstering a child’s reading skills, although necessary, may ultimately prove insufficient in helping them become a proficient reader, unless they also help strengthen poor motivation. They also identified the importance of helping children with poor reading skills to set challenging but reachable reading goals. The achievement of these goals can work to strengthen a child’s belief that they can, with effort, become a better reader. Interventions aimed at improving children’s reading need to combine motivation building techniques with skills building strategies (Morgan and Fuchs, 2007).

A supportive learning environment
Given the importance of motivation, it is not surprising that research shows that for readers who have struggled for years, literacy tutoring interventions are most effective when a personalised and responsive relationship-based approach to reading is combined with student choice of interesting and appropriate material (Cox and Guthrie, 2001, cited in Woolley and Hay, 2007).

The benefits of peer tutors
There is considerable evidence on the effectiveness of using trained peer tutors in programs aiming to support children with reading difficulties (Woolley and Hay, 2007). Peer tutoring is based on co-operative learning, and when children are in an environment of mutual support, where co-operation, shared goals and a sense of responsibility for the reading process are promoted, a sense of belonging, accomplishment and increased motivation will be achieved (Grimes, 1981 cited in Woolley and Hay, 2007). The one-on-one nature of peer tutoring is seen as contributing to increasing the student’s engagement as well as maintaining their attention to the text for longer periods of time (Woolley and Hay, 2007). The last is important given the relationship between reading frequency and skill.
Training and supporting tutors

Research suggests that trained tutors are more effective than untrained tutors and that one-on-one is more effective than group tutoring. Well-trained tutors are particularly effective at improving students’ confidence, and encouraging them to participate, solve problems, use a range of reading strategies and develop independence (Woolley and Hay, 2007).

The pause, prompt, praise method has been shown to be an effective tutoring strategy (Woolley and Hay, 2007) for improving children’s reading. It aims to encourage readers to monitor the meaning of what they are reading and to self-correct (Victorian Department of Education, 2004). The most important components of this approach are that reading materials are at an appropriate level of difficulty for the student and that tutors provide students with feedback as they read the text. One-on-one tutoring allows the student to receive immediate feedback. Effective feedback contributes to the student’s sense of security and encourages them to take risks and try new tasks (Hattie, 1992 cited in Woolley and Hay, 2007).

Providing tutors with a range of resources, ongoing assistance and regular feedback have been identified as important if tutoring is to be successful (Collins and Matthey, 2001 cited in Woolley and Hay, 2007). The manageability of the program from the tutor’s perspective has also been shown to contribute to a program’s success. If tutoring programs are too complex or large, the associated administrative problems have a negative impact on the program’s effectiveness (Collins and Matthey, 2001 cited in Woolley and Hay, 2007). The tasks given to tutors must also be consistent with what they can easily and willingly accomplish (Roe and Vukelich, 2001 cited in Woolley and Hay, 2007).

Tutoring over the phone

The value of individual tutoring for supporting struggling readers brings with it a range of practical issues, such as finding the physical space and time, particularly within a school environment, for such tutoring to occur. Tutoring over the phone was developed in part in response to this, with both student and tutor connecting while in their own homes. This approach helps get around the physical space and time issues and eliminates the need for either party to have access to transportation. Telephone tutoring also means that the pool of available tutors can be matched with students without needing to take account of the students’ physical location. This significantly increases the number of students who can be supported (Strayhorn, 2005).

Further detail on this method is included at Appendix A.
4. The Smith Family and young people’s reading

Supporting literacy in the early years

Given the importance of reading for engagement and achievement in education, The Smith Family has a long history of implementing programs which aim to enhance the literacy skills of children and young people. Since 2004, The Smith Family has been involved in the Let’s Read program in more than 50 disadvantaged communities across Australia. Let’s Read was developed by the Centre for Community Child Health at the Murdoch Children’s Research Institute and the Royal Children’s Hospital. The Murdoch Children’s Research Institute and The Smith Family have partnered to implement Let’s Read with communities across Australia. Let’s Read focuses on developing early literacy skills and provides parents and carers with reading books and support to encourage them to have fun reading with their young children. Between 2007 and 2012, over 210,000 children and their parents/carers have been supported by the Let’s Read program.

Improving reading skills of school aged young people

As the AEDI and NAPLAN data confirm, significant numbers of children and young people in Australia struggle with reading. In the late 1990s, well in advance of the availability of this data, The Smith Family conducted a needs-analysis on the reading support required by the children and young people it was supporting and held discussions with some of their families. The needs-analysis identified the literacy challenges facing many of the students and that the high level of mobility of a significant number of families was impacting on school achievement. Discussions with families also emphasised parent/carer concerns regarding the educational performance of their children.
In response, The Smith Family sought to develop an effective and economically viable method for tutoring students with poor reading skills, with the Study Support Project first piloted in 1997 (Callaghan, 1998). Study Support involved matching a school student who had a reading age around two years below their actual age, with a mentor who was usually at least two years older than the student. The mentor provided one-on-one tutoring over the phone.

The student2student program

The Smith Family has been implementing the student2student program since around 2000, following the successful evaluation over a few years of the Study Support Project. Student2student is primarily aimed at students from Years 3 to 8 who have a reading age up to two years behind their chronological age. It matches them with reading buddies who are at least two years older. The name student2student was chosen to reflect the relationship which is at the core of the program.

The buddies have good reading skills and are trained by The Smith Family to help support the development of the reading skills of the younger student. This includes training in the pause, prompt, praise method, as well as how to ask their student questions and explore whether they comprehend what they're reading. The training takes account of the fact that the program is delivered over the phone.

Student2student runs over an 18 week period with the pair connecting over the phone two to three times a week, for at least 20 minutes at a time. The buddy phones their student at home at an agreed time and the student reads to them from books provided by The Smith Family which are appropriate to the student's reading level. As the program occurs in the student's home, participation is in addition to any literacy support they might receive at school, thereby extending the amount of reinforced reading time that students complete each week. It also reinforces to the family, including siblings, the importance of reading.

The buddy uses the skills and techniques they've learnt in training to assist the student with their reading and they keep a record of each contact. Adult volunteer supervisors provide support to the buddies to reinforce the training and help them address any problems that arise.

Students are selected for the program by referral from their classroom teacher or recommendation from The Smith Family staff. Students complete the Burt Reading test to establish a baseline measure of their reading ability.8

Development of the mobile phone program

In 2010, The Smith Family became aware that a growing number of the families it was supporting did not have a home landline. This was impacting on the capacity of children in these families to participate in student2student, which up until this point had only been available through a landline phone. In 2010, The Smith Family, in partnership with Optus, piloted a mobile phone model of the program, involving 50 matched students and buddies across regional and rural communities. Optus provided the mobile phone handsets and phone credits required to deliver the pilot. Following the successful completion and evaluation of the pilot, student2student has subsequently been delivered through both landline and mobile phones, with the number of mobile participants steadily rising to 525 in 2013, through the support of Optus.

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8 The Burt Word Reading Test is a standardised test which assesses word recognition skills and provides an approximate reading age. It is simple to administer and interpret. It is highly correlated with other tests that assess reading comprehension (Gilmore et al, 1981 cited in the Phonics Handbook – Chapter 7, 2007, SCRE Centre, University of Glasgow). The test is administered before and after the program.
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5. Student2student results

Since the commencement of student2student, The Smith Family has collected and analysed outcomes data for program participants. This has included a comparison of students’ pre and post program Burt reading test scores. Participants are identified as having completed the program if they undertake the Burt test both before and after the program.

As part of The Smith Family’s ongoing process of evaluation and continuous improvement, a more detailed analysis of the 2012 student2student outcomes was conducted in 2013. This analysis included pre and post program Burt reading test scores for 742 participants and post program surveys completed by students, buddies and parents/carers.

Participant demographics

Age of program participants

At the start of 2012, the majority (69%) of student2student participants were aged between nine and 11 years of age, with students ranging in age from seven through to 15 (see Figure 1).

Reading age prior to the program

Figure 2 shows students’ reading age on the Burt reading test, prior to them starting student2student compared with their chronological age. Prior to commencing the program:

- 42.5 percent of participants had reading abilities that were more than two years behind their chronological age
- 29.8 percent had reading abilities that were between one and two years behind
- 26.0 percent had reading abilities that were between one and 12 months behind
- For 1.6 percent of students, their reading age was the same as their chronological age.

Not surprisingly, given the importance of early intervention to address reading problems, older students tended to be further behind in their reading than young students, as shown in Table 3. There were, for example, no students in the age range seven to 10 years, whose reading age was between four and seven years behind their chronological age. This compares to a quarter (24.0%) of 12 year olds and a third (35.1%) of 13 to 15 year olds.

A total of 315 students were omitted from this detailed analysis because of incomplete or inaccurate data.

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Figure 1: Participants’ chronological age prior to student2student, 2012

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9 A total of 315 students were omitted from this detailed analysis because of incomplete or inaccurate data.
Gender, language and cultural background

Approximately half of the 2012 student2student participants were female (52%) and there were no differences in the reading ages of male and female students before the program commenced. Nine percent of participants (or 66) were from Aboriginal or Torres Strait Islander backgrounds and prior to the commencement of the program these students did not differ in their reading ability compared with non-Aboriginal students.

A further nine percent of students (or 69) were from non-English speaking backgrounds. Prior to the program commencing, interestingly students from English speaking backgrounds were further behind in their reading compared with students from non-English speaking backgrounds. Seventy three percent of students from English speaking backgrounds were one year or more behind their reading, compared with 62 percent of those from non-English speaking backgrounds.10

Location of participants

Students from 75 communities participated in student2student, covering all states and territories and including metropolitan, regional and rural communities. A full list of the communities is at Appendix B.

Mobile and landline delivery

Thirty two percent of students (or 238) participated in the program through the use of mobile phones, with 68 percent (or 504), participating through landline phones. There were no differences in the age profile of students in each of the program models. Sixteen percent of Aboriginal and Torres Strait Islander students used the mobile form of the program, while only four students from non-English speaking backgrounds participated in this form of the program.

Table 3: Students’ reading age compared to chronological age, prior to student2student

<table>
<thead>
<tr>
<th>Reading age compared to chronological age</th>
<th>7 to 8 years</th>
<th>9 years</th>
<th>10 years</th>
<th>11 years</th>
<th>12 years</th>
<th>13 to 15 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between 4 and 7 years below</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>10.3%</td>
<td>24.0%</td>
<td>35.1%</td>
</tr>
<tr>
<td>1 to 12 months below</td>
<td>61.9%</td>
<td>33.1%</td>
<td>14.7%</td>
<td>19.9%</td>
<td>13.6%</td>
<td>24.3%</td>
</tr>
</tbody>
</table>

Note: Columns in this table do not total 100% as some students were between 12 months and four years below their reading age and these figures are not included in this table for ease of reading.

10 This could possibly be because students from non-English speaking backgrounds are identified earlier as needing support.
Improving children’s reading through peer support:
The student2student program

Program outcomes

Change in reading level

As shown in Figure 3, at the completion of the 2012 student2student program, more than nine out of 10 students (93%) showed an increase in their reading age relative to the start of the program, with around two thirds (64%) improving by more than six months. Across students of Aboriginal and Torres Strait Islander backgrounds, those from English speaking backgrounds as well as those from non-English speaking backgrounds, at least nine in ten students improved their reading over the course of the program. Similarly, nine out of ten students who participated through either a landline or mobile phone improved their reading age.

Chronological age reached in reading after the program

At the conclusion of the program, twenty percent of students had reached or exceeded their chronological age, with the vast majority of this group exceeding their age. Younger students were more likely than older students to have reached their chronological age by the completion of student2student. A quarter of students aged seven to eight years had reached or exceeded their chronological age by the end of the program, compared to one in ten students aged 12 years. This is not surprising as older students were more likely than younger students to have a large gap between their chronological and reading ages (see Table 3).

Forty five percent of students whose reading age was up to 12 months below their chronological age before they started student2student, reached or exceeded their chronological age by the end of the program. In comparison only one in ten students who were more than a year behind in their reading at the start of the program reached their chronological reading age by the end of the program. These differences in outcomes reinforce the benefit of intervening early with young people who are struggling with their reading.

Post program surveys of students, parents/carers and buddies

At the end of the program, students and their parents/carers were invited to participate in a survey and over 230 surveys were completed. In addition, over 400 buddies also completed a post-program survey.

The best thing about student2student for students

Students were asked what they saw as the best thing about student2student. The most common responses were related to one of three areas:

- Reading and talking over the phone with their buddy
- Improving their reading and confidence
- The quality of the books they received.

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Figure 3: Change in reading age, post program compared with pre-program

![Bar chart showing change in reading age](chart.png)

11 Students aged 13 years or older were removed from this analysis as the Burt reading test is only able to measure reading ages up to 12.6 years.
Reading and talking over the phone with their buddy

Many students commented on the value of being able to read to a supportive buddy who was also a student, the benefit of doing it over the phone, as well as the enjoyment they got from talking with their buddy about a range of things. For some students, the anonymity offered by the program was also noted as a positive. The comments below are indicative of the types of remarks frequently made by students regarding the best part of the program.

“Knowing there was someone who wanted to help me.”
“That I got to talk to my buddy, she listened and stopped me and helped me when I was stuck on a word or made a mistake.”
“Reading to another student and her encouragement.”
“Having one on one time to read to someone outside my family.”
“I felt special when he called me.”
“That I could read to my buddy and talk about our days.”
“Talking to someone I didn’t know over the phone made me work harder.”
“It was good reading to someone who I didn’t know because they didn’t judge me when I made mistakes.”

Improving students’ reading and confidence

Many students were able to identify that their reading and confidence had improved over the course of the program and saw this as the best part about student2student. As reflected in the students’ comments below, for some this improvement was about the words they knew, for others it was about their overall reading ability and for others again it was the impact on their performance at school.

“Being able to pronounce a word I couldn’t previously.”
“I liked it because it helped me to read better.”
“I got to learn more words.”
“I improved my knowledge.”
“When you get a reliable buddy it boosts up the confidence.”
“Improving my reading and moving up levels at school.”

Quality books

The quality of the books and that they were new and interesting were identified by some students as being the best parts of the program.

“Reading the fun books that I have never read before.”
“Wonderful books that I had never read.”
“The fun stories coming in the post.”

One student also noted the organisational benefits of being involved in the program, stating that the best thing was learning to note the day and pay attention to the time of the calls.
The best thing about student2student for buddies

The two most common responses buddies gave about the best thing about student2student were:

• Seeing an improvement in their student’s reading and/or confidence
• Being able to help someone.

Other common answers included getting to know their student, and the fact that the program involved reading, an activity that many buddies identified as being important to their student’s future but also something that they themselves enjoyed.

Seeing improvement in their student

A large number of buddies identified that being able to see their student improve in their reading and their confidence was the best part of student2student as highlighted in the comments below:

“I think the best part was seeing the progress of my student. When she was more confident she wanted to read. It was very rewarding for me.”

“I loved how much my student improved his reading.”

“Hearing the excitement in Briana’s voice when she did something really well and I praised her for it.”

“Hearing my student fluently read words or phrases that they had previously read incorrectly or stumbled over.”

“Hearing my student had reached top marks in her class for reading in NAPLAN tests.”

“The best part was at the end when we reflected on his progress and realised he had learnt a lot.”

Being able to help someone

The opportunity offered by the program to help someone was also seen as being important by many buddies:

“The best part was being able to hang up every time you made a call and know you’re making a difference to someone else’s life.”

“I was able to help someone and am proud. This gives me a taste of responsibility.”

“Making a difference. I know my reading buddy was grateful and that really made me feel good about myself. When I spoke to my buddy’s mother, I felt she was really supportive of her child and thankful that I was helping out.”

Getting to know their student

Just as many of the students had identified that they enjoyed the social dimension of student2student, many buddies also indicated that they enjoyed getting to know their student. For some buddies this also contributed to an improvement in their own confidence:

“Being able to get to know my student and speak to him regularly about different things he wanted to tell me.”

“Being able to make a new friend.”

“Developing a mutual respect with Simon.”

“I believe the best part is the conversation because this gained the confidence of both.”

“Towards maybe the sixth week, my student and I developed a really good relationship which never felt uncomfortable in the slightest and it was at this point that I really saw the reading come on and she was no longer shy to ask questions.”

“Having a strong relationship with a child younger than me. Improving my phone skills as before I was shy talking on the phone.”

“Overcoming my nervousness and making friends with Leann.”

Other positive aspects for buddies

A number of the buddies identified that they were keen readers and really appreciated being able to pass the enjoyment and skill of reading onto their student. As one young buddy expressed it, “as a person who really enjoys reading myself, it felt great to be able to help another person do it.”

As with the students, some of the buddies also commented positively on the anonymity of the program, saying, “I believe it was a good thing for the reader to communicate with someone that they didn’t know, therefore he didn’t have to be as embarrassed making mistakes in reading and didn’t hesitate to ask how to pronounce the word or what it meant.”

Buddies also commented that the program was flexible, relatively easy to be involved in and not too time consuming for them.

Students’ enjoyment and reading improvement

The positive benefits of student2student were reflected in the vast majority of students (94%) reporting that they had enjoyed participating in the program and that they thought their reading had improved over the course of the program (91%).

Parents and carers confirmed these positive findings with 94 percent agreeing that their child’s reading had improved over the course of the program.
Improving children’s reading through peer support:
The *student2student* program

**Reading more**
Importantly, the program increased the volume of reading that students engaged in with 83 percent of students indicating that they were reading more at the end of the program than when they had started. Again, parents and carers confirmed this with 85 percent agreeing that their child was reading more often.

**Relationship with school and sense of self**
The majority of students recognised the flow-on benefits that participating in *student2student* had on their ability to perform their school work. Eighty one percent of students agreed that the reading they did through the program made it easier for them to do their school work and that the program helped them feel better about school. Ninety two percent of parents agreed that *student2student* helped their child feel better about themselves.

**Recommending *student2student* to others**
Students, parents and carers endorsed the value of the program for others with 87 percent of students and 95 percent of parents/carers agreeing at the end of the program that they would tell other young people and families to be involved with *student2student*.

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**Table 4: Post program responses from students and parents/carers**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Proportion of students who strongly agreed or agreed with the statement (%)</th>
<th>Proportion of students who strongly disagreed or disagreed with the statement (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I enjoyed doing <em>student2student</em></td>
<td>94</td>
<td>6</td>
</tr>
<tr>
<td>My reading has improved since I’ve done <em>student2student</em></td>
<td>91</td>
<td>9</td>
</tr>
<tr>
<td>I read more now than when I started <em>student2student</em></td>
<td>83</td>
<td>17</td>
</tr>
<tr>
<td><em>Student2student</em> helped me feel better about school</td>
<td>81</td>
<td>9</td>
</tr>
<tr>
<td>The reading I did through <em>student2student</em> made it easier to do my school work</td>
<td>81</td>
<td>9</td>
</tr>
<tr>
<td>I would tell other kids to do <em>student2student</em></td>
<td>87</td>
<td>13</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Statement</th>
<th>Proportion of parents/carers who strongly agreed or agreed with the statement (%)</th>
<th>Proportion of parents/carers who strongly disagreed or disagreed with the statement (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>My child’s reading has improved since they started the <em>student2student</em> program</td>
<td>94</td>
<td>6</td>
</tr>
<tr>
<td>My child reads more often than when they started <em>student2student</em></td>
<td>85</td>
<td>15</td>
</tr>
<tr>
<td>The program has helped my child feel better about themselves</td>
<td>92</td>
<td>8</td>
</tr>
<tr>
<td>I would recommend <em>student2student</em> to other families</td>
<td>95</td>
<td>5</td>
</tr>
</tbody>
</table>
## 6. Conclusion

Research highlights the importance of providing additional support to children and young people who are struggling with reading, particularly before they fall too far behind. Literacy skills are pivotal to a child’s capacity and motivation to engage in education and learning and poor literacy skills lead to a reduced likelihood of completing school and making successful transitions to adult life through employment and civic participation. Poor literacy skills also have inter-generational effects as parents who have low levels of literacy are less able to encourage and engage their own children in reading.

Since 1997 and in response to a significant need for extra-curricular reading support programs, The Smith Family has offered an effective and economically viable method for tutoring students with poor reading skills. **Student2student** is a peer-mentoring reading program that provides one-on-one peer tutoring over the phone. The positive benefits of the program are apparent in both objective reading test scores and in self-reported perceptions from students about the advantages of participating in the program. Importantly, at the completion of the program, students recognise that their reading skills have increased, that they are reading more and that their improved skills are assisting them with their school work. These outcomes are confirmed by the parents/carers of the children and young people who take part in the program.

In addition, the program has positive outcomes for the young people who take on peer-mentoring roles as reading buddies. These young people gain a high degree of satisfaction in seeing their student’s reading levels improve and in being able to help someone else to gain an appreciation in and confidence for reading.

As well as being effective, **Student2student** is cost effective, with the organisational costs associated with the program equating to just over $1,100 per student. These costs relate to program coordination, the recruitment of volunteer buddies and supervisors and direct costs associated with the provision of books to students and their mentor buddies. These costs, however, are complemented by the significant time and effort that is generously provided by the volunteer buddies and supervisors. In addition, the success of this program is also dependent on The Smith Family’s capacity to coordinate the large-scale delivery of such a program and to leverage support from corporate partners, such as Optus, so as to ensure that approximately 1,000 students a year benefit.
Appendix A – The pause, prompt, praise method

Pause
If a mistake occurs, pause; wait to give the student a chance to solve the problem. Allow a few moments for thinking time before expecting an answer.

Prompt
Give a hint or lead to encourage a response:
- If the student stops at an unknown word and cannot continue, ask them to read on to the end of the sentence or to reread from the beginning of the sentence and to try again. A brief discussion of the content or storyline may help the student to make a sensible guess at an unknown word.
- If the student makes a substitution that does not make sense, prompt with clues about the meaning of the content or story, e.g. ask a question.
- If the student makes a substitution that does not look right, prompt with clues about the way the word looks, e.g. ask about one part of the word that looks wrong.
- If the student makes a substitution that does not sound grammatically correct, prompt by drawing attention to the way it sounds.
- If the word is not correct after two prompts say, ‘the word is.’

Praise
It is very important that students are praised and encouraged in their efforts. Use a variety of encouraging words and phrases to support students with their attempts. Your praise will greatly assist students’ literacy development:
- Praise when the student reads a sentence correctly: ‘I like the way you…’
- Praise when the student corrects himself or herself after a mistake: ‘I liked the way you worked that out’.
- Praise when the student gets a word correct after your prompt: ‘you worked that out well’.
- Praise your students with comments that provide feedback: ‘that’s great, well done’.


Appendix B – Student2student communities

Improving children's reading through peer support:  
The student2student program

8. References

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