Flinders University
Australian Industrial Transformation Institute

Evaluation of the Trial of the UK Phonics Screening Check in South Australian schools

Ann-Louise Hordacre, Cecilia Moretti, John Spoehr

Australian Industrial Transformation Institute

December 2017

Evaluation of the Trial of the UK Phonics Screening Check in South Australian schools

Australian Industrial Transformation Institute

College of Business, Government and Law
Flinders University of South Australia

1284 South Road
Clovelly Park
South Australia 5042

www.flinders.edu.au/aiti

URL:http://www.flinders.edu.au/aiti/

CAT: AITI201717

Suggested citation:

Hordacre AL, Moretti C & Spoehr J. 2017. *Evaluation of the Trial of the UK Phonics Screening Check in South Australian Schools*. Adelaide: Australian Industrial Transformation Institute, Flinders University of South Australia.

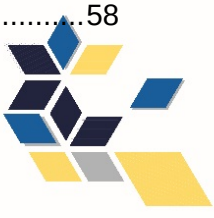
Key findings

- The Phonics Screening Check (PSC) included a total of 40 words and comprised a series of 12 simple pseudo-words, followed by 8 simple real words, 8 complex pseudo-words and 12 complex real words.
- 4,406 Reception and Year 1 students, 268 teachers and 56 primary schools participated in the South Australian trial of the PSC.
- Reception students pronounced an average of 11 words correctly - half the 22 words correctly pronounced by Year 1 students.
    - By the halfway point (after the 20 simple words) 88% of Year 1 but only 57% of Reception students were still participating in the PSC.
    - By the final word, only 22% of Reception students and 63% of Year 1 students were still participating.
- Only small gender differences were evident in PSC results, with females pronouncing an average of one more word correctly than male students.
- Age accounted for 17% of variance in Year 1 results, but was not an influence of note for Reception students.
- Country students performed worse than metropolitan students, pronouncing 4 to 5 fewer words correctly.
- 6.1% of students were of Aboriginal and Torres Strait Islander background, with these students pronouncing 6 fewer words correctly than other students.
- Reception students with EALD funding pronounced one fewer word correctly than their peers, while Year 1 students benefitting from EALD funding pronounced five fewer words correctly than other Year 1 students.
- Teachers and leaders reported very favourably about the preparation and support material provided for the PSC and were confident it could be administered well with students.
- However, there was inconsistency between teachers in how they understood and applied instructions for stopping the PSC.
    - The different approaches to stopping and re-starting the check led to student results that are not directly comparable – except where the stop decisions are applied uniformly (for example within a class or school).
- Readers assessed by their teacher as fluent, average or struggling were all rated as staying on task and responding positively to the PSC. However, struggling readers were more challenged by blending and sounding out words.
- The PSC was assessed by teachers and leaders as able to identify students needing additional help with their phonics skills.
- Leaders reported the PSC was useful as a conversation starter in their early learning teams about the best approach to phonics teaching.
- Teachers reported using the results to design differentiated learning and intervention processes and to understand more about the level of their students' phonics learning.
- Teachers had some concerns about applying the PSC for Reception students, but generally agreed it provided them with more information about the success of their teaching approach.

Contents

List of Tables

List of Figures



Executive Summary

Between 7 and 18 August 2017, the South Australian Department for Education and Child Development (DECD) conducted a pilot of the UK Phonics Screening Check (PSC) for Reception and Year 1 students across the state. The PSC consists of a collection of 40 real and pseudo-words which were administered by teachers one-on-one with students. The structure of the PSC comprises a series of 12 simple pseudo-words, followed by 8 simple real words, 8 complex pseudo-words and 12 complex real words. DECD collected and collated the data of 4,406 students from 268 teachers across 56 primary schools. This report presents the independent evaluation of the pilot which was conducted to understand the usefulness of the PSC for school leaders and teachers with regard to their students' phonics development.

Analysis of Phonics Screening Check results

Student profile

Just over half (52%) of students participating in the PSC were from Reception, with the remaining students from Year 1. Year 1 students were an average of one year older than Reception students. Males (49.9%) and females (50.1%) were evenly distributed across the year levels. Students from metropolitan schools (72%) made up the largest proportion of PSC participants, followed by 17% of students from Greater Adelaide and 11% from country schools. Aboriginal and/or Torres Strait Islander students contributed 6.1% of the participant population and were more likely to be from country schools where they contributed 15% of the student population. Reception students were more likely than Year 1 students to qualify for English as an additional language or dialect (EALD) funding (18% and 12%, respectively).

Phonics programs used in schools

There was general agreement between teachers and leaders as to the degree to which synthetic and analytic approaches were used to teach phonics. Nineteen out of twenty leaders and four in five teachers reported synthetic approaches were used most, to all of the time, with analytic approaches reported to be used most, to all of the time by one quarter of leaders and more than a third of teachers. Two in five leaders indicated an incidental approach was never used in their school compared with one in seven (14.3%) teachers.

Four in five students were taught phonics using the Jolly Phonics program exclusively or in combination with other programs, with Jolly Phonics rated as useful by 86% of teachers and leaders (twice that of other programs). MultiLit was used for 16% of participants, with three quarters of these also using Jolly Phonics. Information about the phonics program being used was not provided for 13% of participants.

Analysis of PSC words

The evaluation found the PSC was suitable to differentiate between the phonics skills of Reception and Year 1 students with the number of words correctly pronounced varying statistically by year level. Reception students pronounced an average of 11 words correctly - half the 22 words correctly pronounced by Year 1 students. We note, just over one fifth of Reception students were unable to correctly pronounce any word compared with only one in twenty-four Year 1 students. At the other end of the scale, only one-in-fifty Reception students correctly pronounced between 36 and 40 words - compared with one in six Year 1 students.

Simple pseudo-words

Approximately three in five Reception students and four in five Year 1 students correctly pronounced the first three simple pseudo-words in the PSC. Participation remained high for Year 1 students at 94%, but dropped markedly for Reception students with one quarter of these students no longer participating by the sixth word (having been stopped by the teacher). The seventh pseudo-word, DOIL [7] proved problematic for both year levels. Three quarters of Reception students attempted the word – but only one in five of these had correct pronunciations. Of Year 1 students, 92.8% of students attempted DOIL [7] with only two in five of these pronouncing the word correctly.

Simple real words

Response rates rebounded to 91-92% for Reception students and 98% for Year 1 students for the first three of the eight simple real words. DECK [14] and HORN [15] proved the most difficult in this collection of simple real words, correctly pronounced by 41-47% of Reception students and 71-74% of Year 1 students reading them. We note that of all the words in the PSC, QUEEN [16] is likely to be the most familiar to young students as it is commonly used in alphabet games, songs and flash cards. This is likely to account for the comparatively high proportion of Reception (63%) and Year 1 (86%) students pronouncing it correctly.

Complex pseudo-words

JIGH [21] was the first of the eight complex pseudo-words. By this point, 88% of Year 1 but only 57% of Reception students were still engaged with the PSC. There was a significant decline in the proportion reading these words and pronouncing them correctly with JIGH [21] and RIRD [23] pronounced correctly by only 14% of Reception students attempting them, compared with approximately 32% of Year 1 students. Only 31% of Reception students and 69% of Year 1 students attempted the final word in the set of complex pseudo-words.

Complex real words

In this set of words, HAUNT [30] proved the most difficult with only 5% and 20% of Reception and Year 1 students, respectively, who attempted the word pronouncing it correctly. Low accuracy for the first three words meant participation dropped before steadily declining across the remaining words down to the final word which was attempted by 22% of Reception students but 63% of Year 1 students. Although attempted by a relatively low proportion of students, WISHING [39] was correctly pronounced by a comparatively high proportion of both Reception (57%) and Year 1 (85%) students.

Year level analysis

On average just over one quarter (27%) of all Reception students correctly pronounced each word, compared with more than half (56%) of all Year 1 students. Reception students were most likely to pronounce simple pseudo-words BEFF[5], SHUP [6] and HAPS [11] correctly with 69-71% of Reception students correct in their attempts. While usually strong with the simple pseudo-words, including HAPS [11] (87%), two of the three words with most correct attempts by Year 1 students were simple real words – CHIN [13] (85%), QUEEN [16] (86%).

Of all correct attempts at words, proportionally fewer correct responses were received from Reception students for PHOPE [24] (13%), HAUNT [30] (13%) and BRIGHTER [40] (15%). Reception and Year 1 students had most difficulty with complex words: HAUNT [30] (5% and 20% correct, respectively), JIGH [21](14% and 34%, respectively) and RIRD [23] (14% and 31%,

respectively) – with Reception students also struggling with PHOPE [24] (12%) and STAIR [29] (14%).

Gender

Relatively small differences were evident by gender with females correctly pronouncing one more word than males in both Reception and Year 1. Noting that most of this discrepancy lay in the difference between students who were unable to answer any words correctly. For Reception students statistical differences between males and females were evident for simple pseudo-words LIG [1], MEP [2], and EMP [4], and for simple real words CHIN [13] and DECK [14], with females consistently achieving more correct pronunciations. Differences were strongest between males and females at commencement of each set of simple words (pseudo and real), with the decline in statistical gender differences corresponding with the lower rate of male participation.

For Year 1 students, females were more likely to correctly pronounce BARST [12], CHIN [13], HORN [15] and WISHING [39]. Complex real word HAUNT [30] and complex pseudo-word RIRD [23] were poorly pronounced overall, but were statistically more likely to be pronounced correctly by males than females.

Age

A bell-shaped curve was evident for the scores in each year level, with lowest PSC results in the youngest and oldest members of the cohort. Trend lines show there is no real age effect for Reception students, whereas age accounted for 17% of the variance in PSC performance in Year 1. We draw attention to the tails in each distribution which show a decline in PSC scores for the oldest members of the year level groups. This suggests that some students who commence late or are held back do not achieve the same level of phonics attainment as their classmates during the first two years of school.

Location

There was no statistical difference for the Mean number of correctly pronounced words between metropolitan and Greater Adelaide students in either Reception or Year 1. However, country students pronounced approximately 4 fewer words correctly in Reception and 5 fewer words in Year 1 than metropolitan students. Most of this difference is accounted for by the high proportion of students from country schools who correctly pronounced five or fewer words. Double the proportion of country Year 1 students were no longer attempting the PSC by the end of the set of simple pseudo-words, and despite resuming the PSC at commencement of the simple real words, were twice as likely not to be participating when the complex words started. This differential grew with three in five Year 1 country students not completing the final word in the PSC.

FREX [9] was pronounced correctly by almost two thirds of attempting country Reception students – the highest correct response for country students for any word. DOIL [7] was pronounced poorly across the board, but fared particularly poorly for country Reception students who with 11% correct pronunciations were half as successful as metropolitan Reception students (24%). Complex pseudo and complex real words were poorly pronounced by country Reception students, but this differential was not evident in Year 1.

Aboriginal and Torres Strait Islander students

Only 267 Aboriginal and Torres Strait Islander students undertook the PSC comprising 6.1% of participating students with this cohort pronouncing six fewer words correctly than other students in Reception and eight fewer in Year 1. At the end of the simple pseudo-words only one third of

Aboriginal Reception students were participating in the PSC. This rebounded in line with the stop instructions for simple real words. However, teachers were less likely to restart non-participating Aboriginal and Torres Strait Islander students than other students. By the final word of the PSC only one in ten Aboriginal and Torres Strait Islander Reception students and two in five Year 1 students were still participating, compared with almost one quarter and two thirds of other Reception and Year 1 students, respectively.

Differences between Aboriginal and Torres Strait Islander and other students were in the range of around seventeen percentage points for Reception and fifteen percentage points for Year 1 students. The largest differences between Aboriginal and Torres Strait Islander and other Reception students tended to be found at the beginning of the simple pseudo-words and again at the beginning of the simple real words with high rates of difference preceding the sharp decline in participation once the stop instructions had been applied, indicating a difficulty with pronouncing any, rather than specific, words.

Qualified for EALD funding

Reception (18%) students were almost one and a half times as likely to qualify for EALD funding as Year 1 (12%) students indicative of the growth in oral language skills from Reception to Year 1. EALD Reception students pronounced one fewer words correctly than other Reception students, while EALD Year 1 students pronounced five fewer words correctly than other Year 1 students. We found a statistically significant interaction effect with a greater difference between Reception and Year 1 students for 'other' students (109%) than for EALD students (84%). Similarly, the proportional difference between EALD and other students was greater for Year 1 (30%) than Reception (15%).

After the first three words, few statistical differences were found for Reception students, although EALD students were found to be more successful in pronouncing simple pseudo-word CHARB [8] and complex real word WISHING [39]; whereas other Reception students were more likely to pronounce simple real word CHIN [13]. EALD Year 1 students pronounced eight of twelve simple pseudo-words, six in eight simple real words, five of eight complex pseudo-words and four in twelve complex real words statistically less often than other students. The comparatively high number of statistical differences for this set of words suggests a real and ongoing difference in student phonic skills for those remaining eligible for EALD funding at the Year 1 level.

Analysis of letter combinations

Consonant digraph

BEFF [5] and SHUP [6] proved the easiest of consonant digraph words, correctly pronounced by seven in ten participating Reception students and four in five participating Year 1 students. Of these words, CHARB [8] proved the most challenging for both year levels with only two in five Reception and three in five Year 1 of attempting students pronouncing it correctly. Despite this, CHARB [8] joined DECK [14] and WISHING [39] as the consonant digraph words showing the most student improvement – with around fifty percent increase in the proportion of students pronouncing these words correctly from Reception to Year 1.

Frequent and consistent vowel digraphs

DOIL [7] was one of the most difficult words in the PSC with only one in five Reception students attempting the word pronouncing it correctly – half the proportion correct of the two other simple pseudo-words in this set of frequent and consistent vowel digraphs. Year 1 students were almost twice as likely to pronounce DOIL [7] correctly, although response remained comparatively low. With a 6.4 percentage point difference between Reception and Year 1, FLOOST [26] was only

pronounced slightly better by Year 1 (63%) compared with Reception (56%) students – the smallest difference of any word in the PSC.

Less frequent and consistent vowel digraphs

Students attempting the word HAUNT [30] struggled more with it than any other word with fewer than one in twenty Reception students and one in five Year 1 students pronouncing it correctly. RIRD [23], PHOPE [24] and STRIBE [28] also proved challenging, particularly for Reception students where fewer than one in six were able to pronounce them. By the end of the PSC when the final complex real words were tested only the higher skilled students from each year level remained to attempt words. Of the final less frequent and consistent vowel digraph words, ARROW [37] was pronounced correctly by more Reception (40%) and Year 1 (73%) students than other words, with an improvement of 84% from Reception to Year 1.

Trigraphs

The three trigraphs were included in second (complex) half of the PSC. JIGH [21] and STAIR [29] proved equally challenging for Reception students. However, familiarity with the word STAIR [29] may have accounted for the greater improvement (211%) in pronunciation for this word by Year 1. BRIGHTER [40] was pronounced correctly by twice as many Reception students as the other trigraphs – although fewer than one in four Reception students attempted the final word of the PSC, compared with one in two of these students attempting STAIR [29] and JIGH [21].

Analysis of the teacher and leader survey and interviews - experience of the administration, value and use of the PSC

Administration

Teachers and leaders agreed the support materials provided for the PSC were easy to understand and follow, and that they provided all required information to administer the PSC with students. Induction sessions were also viewed favourably, and there was general agreement that advice was available when needed, with a few unsure about the availability of this advice. Some teachers and leaders commented that the induction sessions should have concentrated more on guiding technical implementation and answering questions from the audience, while others identified a missed opportunity as information was not provided regarding interpretation of the results and how to action them. Others discussed the broader value of the induction sessions for providing the opportunity for the school teams to discuss phonics experience amongst themselves and with other schools.

PSC support material was viewed extremely favourably with all but a handful of teachers and leaders agreeing it was easy to use. The simplicity of the material and the administration helped win over some staff who had originally been resistant to the PSC. A criticism was that the material used fonts that were unfamiliar to young Australian students which was seen as adversely impacting the ability of some to correctly read the words.

Teachers and leaders had confidence in their own or their teacher's ability to implement various aspects of the PSC, although there was notable confusion over the implementation of the stop instructions and subsequent scoring, with different approaches to its application within and between schools. Many teachers reported administering the PSC in exactly the same way for all students irrespective of EALD or Indigenous background (even though EALD students did generally tend to struggle with blending more than others). However, these teachers did report adapting their approach on occasions for students with language and/or speech impairments and stopped earlier for students with intellectual disabilities, behavioural issues and/or learning

difficulties. Other teachers varied the procedures based on their understanding of particular students' capabilities, such as continued scoring if they thought students would be able to achieve words in later lists.

It was clear there was confusion regarding the application of the stop instructions. Some teachers endeavoured to apply a consistent approach for their students, always ceasing after three errors - others continued. If continuing, some teachers scored all subsequent correct words, while others continued the test but ceased scoring. Some teachers recommenced at the real words, others did not. Only 53% of responses administered the PSC by ceasing it after three incorrect responses and (if in the pseudo-word section) skipping students ahead to the next real word section upon which the students would be ceased again after the next series of three incorrect words. We note that teachers of Reception students were statistically more likely than Year 1 teachers to continue the test after three consecutive errors. Some teachers who complied with the stop instructions expressed disappointment, as they felt their students would have achieved higher scores if they continued.

The practice sheet was routinely used by the majority of teachers (83%) with the remainder applying it selectively when they thought it was necessary. As few teachers had previously used pseudo-words, the practice sheet was seen as a valuable opportunity to introduce the 'monster language'. Seven in ten teachers administered the PSC in a reading, or other small, room, although some reported difficulties as they were competing for limited space with other teachers who were also undertaking the PSC. There was also a need to secure a space not too far from the classroom, to minimise the time involved in walking students to and from the PSC location. All teachers emphasised that the PSC would be impossible to administer in the busy classroom area, hence the key importance of teacher release time.

Experience of the PSC

Teachers rated average and fluent readers as usually on task, responding positively to the PSC and able to pronounce the words. In contrast, there was some agreement that struggling readers responded positively to the PSC process and stayed on task, although it was felt that struggling readers had problems with understanding and blending words without prompting or sounding out pseudo-words. There was no indication that struggling readers had more difficulty than others with the length and duration of the PSC.

Teachers commented that all students 'loved' the one to one time doing the PSC with them. Students were highly interested and engaged by the 'monster format' of the PSC which made the task fun. The fact that the PSC was short, easy and fun helped with keeping children engaged. Students were already familiar with testing regimes although the PSC was presented as a check, rather than test. Teachers expressed some concern about the application of the PSC in the middle of the Reception year when students were still very early in their phonics learning.

For many teachers and leaders, the PSC was an eye-opener with many expressing surprise and disappointment about the results - particularly for students they identified as strong readers. For these students, poor results were attributed to unfamiliarity with pseudo-words and an inability to break down sounds and blend words. Some recognised the importance of these skills as reading became more complex in the middle primary years.

Value and utility

Leaders were more likely than teachers to perceive the usefulness and value of the PSC. All leaders and four in five teachers agreed or somewhat agreed that the PSC was able to accurately identify pupils who needed extra help with their decoding skills. Slightly fewer thought the PSC provided useful diagnostic information for designing future learning. However, while

seven in ten leaders thought the PSC was more efficient than other current screening processes – only two in five teachers thought this was the case. Leaders and, to a lesser extent, teachers expressed value in the PSC identifying gaps in phonics learning and in having access to consistent, standardised phonics data - '*same test, same simple procedure applied across all children*'. This knowledge helped leaders know where extra support was needed and when conversations with teachers and/or parents were required. Many teachers also indicated the PSC results encouraged them to revisit their teaching focus and undertake more explicit teaching of sounding and blending.

Respondents generally saw the PSC as dovetailing with other data collection processes, serving one purpose among many – which may explain why it was not generally viewed as more efficient than other screening processes. A common observation was that the PSC has scope to provide valuable baseline data for measuring progress from Reception to Year 1. In addition, they sought a benchmark so they could determine whether the student's scores were appropriate for their year level.

The PSC was deemed effective by leaders for initiating conversations about the results and getting early learning teams to think and talk about their direct teaching methodology and whether their approaches were working to maximum potential.

Jolly Phonics is established in many schools with its benefits and limitations well recognised. Where this is in place, the PSC was felt to be unlikely to greatly impact phonics teaching practices. However, there was a perception that it may exert a greater impact on schools that have not yet established a systematic phonics teaching approach. Teachers identified a lack of training, information and resources addressed to the 'where to next' of the PSC. This was mainly a problem for the schools that were less experienced in teaching phonics and needed greater support in devising a whole of site and classroom-based response.

Use of PSC results

There was a trend for leaders to expect that teachers would make greater use of the PSC results than teachers indicated they would. Although not aligning with leader expectations, three quarters of teachers agreed, at least to some extent, that they would use the PSC to design differentiated learning and intervention processes, that they would use results in their consideration of whether students have enough practice in blending sounds to read words, and in their thinking about student approaches to tackling unknown words.

PSC results were put to work in a range of ways in schools and classrooms, with this most common in sites distinguished by strong leadership and heightened staff engagement with phonics teaching and learning. Leaders reported collating and utilising the data and information from the PSC to respond to individualised needs of students and to shape classroom teaching practices. At a classroom level, some teachers devised warm ups and games to assist with learning how to blend words and grouped students according to phonics abilities. Teachers also targeted poorly performing Reception students for additional program and/or SSO support. A few teachers reported going back to 'practice as usual' after administering the PSC (i.e. not translating the results into any kind of practical application), often because there was no guidance about what to do next and no benchmarks to measure results against.

Embedding and sustaining phonics teaching

Within some schools there is a somewhat fragmented approach to phonics with teachers using different approaches and programs. Participating teachers and leaders called for DECD to develop a focused and strategic plan to drive phonics development, including providing funding for training and resources, with this important to underpin a site-based commitment to action.

Implementation of standardised testing is often viewed favourably by leaders but comes up against resistance from teachers. Leaders argue that tools such as the PSC provide an indication of how students, programs and teaching practices are tracking, and stops students slipping under the radar. Teachers emphasise their professional competence and knowledge of their students' strengths and limitations. However, most of the teachers consulted supported the PSC as a valuable mechanism for determining the effectiveness of their phonics teaching with only a few eschewing testing, particularly of Reception students. All agreed that the results must be inherently useful to teachers and leaders for the PSC to be successful.

The sustainability of the PSC was much more likely if support and resources were available to resolve the problem along with continuing evidence-based professional development to reinforce the importance of phonics and how to best teach it. Formalised release provisions were considered essential for the implementation of the PSC as class teachers are best placed to ensure students are comfortable and stress-free and to make informed adaptations for students as required. Concern was expressed about the implications to results if this release was no longer available and the PSC was administered within the classroom.

Conclusion

The PSC proved successful in differentiating between Reception and Year 1 students on their phonics skills and identifying students who were underperforming compared with their peers. It was also well received by both teachers and leaders. The key PSC administration issue involved a lack of clarity in instructions for stopping the Check. This resulted in a divergence of approaches as to when to stop the PSC, if and when to restart the PSC and how to score it. Teachers and leaders valued the PSC for its ability to identify gaps in phonics learning. However, there was a call for more information to assist interpretation of the results and a request for additional phonics resources and professional development for teachers.

To assist readers to navigate through this report to the areas of interest, please note this report is comprised of three main sections:

1 Background and approach

The United Kingdom Phonics Screening Check was first run in the UK in 2012 after being piloted the year earlier. With a few exceptions, all Year 1 children participate in the Check. The UK Check consists of a collection of 40 real and pseudo[1] words which are administered by the teacher one-on-one with each student. An evaluation has been conducted with UK teachers finding the Check has had an impact on teaching practice resulting in more time being allocated to phonics, a more systematic approach being applied, at a faster pace and with better assessment[2]. The UK evaluation reported student learning that could be directly attributed to the Check was difficult to discern but appeared to be related to attainment of phonics skills, rather than literacy at Year 1 level. However, comparisons between the PSC and other tests found strong correlations with teacher and standardised assessments of phonics, reading and maths with the ability to correctly identify students at risk of reading problems[3].

In 2017, the South Australian Department for Education and Child Development (DECD) conducted a pilot of the UK Phonics Screening Check (PSC)[4] for Reception and Year 1 students across the state. Schools with interest in participating in the PSC responded to an Expression of interest during May 2017. Teachers and leaders from these schools were invited to attend an induction session and were provided with all the required resources and instructions to undertake the PSC which was scheduled to be conducted between 7 and 18 August 2017. This report presents the independent evaluation of the trial, commissioned by DECD conducted by the Australian Industrial Transformation Institute (AITI), which aims to understand the usefulness of the PSC for school leaders[5] and teachers with regard to their students' phonics development.

[1] Pseudo-words are used as they are novel for all readers. The ability to correctly pronounce pseudo-words indicates the presence of skills enabling the reader to decode unfamiliar words. The 40 PSC words are changed each year.

[2] Walker M, Sainsbury M, Worth J, Bamforth H & Betts H. 2015. *Phonics Screening Check Evaluation: Final Report*. National Foundation for Educational Research.

[3] Buckingham J. (2016). *Focus on phonics: Why Australia should adopt the Year 1 Phonics Screening Check*. Centre for Independent Studies.

[4] DECD had received approval from the UK Government to undertake this pilot on the condition no changes were made to the material used, which had been administered in the UK in 2016.

[5] In this report, we will use the term 'leaders' to refer to the group that include principals and leaders.

1.1 Data analysis of PSC student outcomes

The student outcomes component of the evaluation involves analysis and reporting on data collected by teachers for the UK Phonics Screening Check (PSC) trial project. DECD collected and collated data of 4,406 students from 268 teachers across 56 primary schools.

The data analysis has been designed to explore PSC results of correct and incorrect responses for real and made-up words by:

- Year level (Reception, Year 1)
- Gender
- Location (metropolitan, Greater Adelaide and country)
- Aboriginal or Torres Strait Islander status
- Qualification for English as an additional language or dialect (EALD) funding

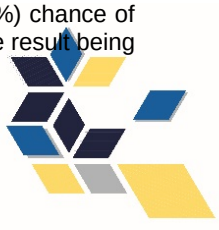
Quantitative data was analysed using SPSS statistical software. Data is presented as either proportions (%), counts (n) or as Means or arithmetic averages ($\overline{X}$) on a Likert (rating) scale with a range of 1 through 5; and presented in tables or figures. Statistical testing has been undertaken where relevant and appropriate with reference to the sample size and characteristics of the data. Data and findings that may lead to the identification of individuals will not be not released (i.e. crosstab data with small cell sizes are not presented). Analyses involve descriptive statistics, parametric (e.g. t-tests, analysis of variance) and non-parametric (e.g. chi-square) tests. Statistical significance indicates whether data points or 'observations' reflect a pattern or have occurred by chance. Where results reach *statistical significance*[6] (e.g. indicating a difference between two or more groups) this will be identified and commented on.

1.1.1 Note about the analysis

The PSC has been designed as a tool for teachers. It provides information on student progress in phonics, helping to identify individual and class problem areas in order to better tailor lessons and interventions. For the purposes of the South Australian evaluation we have analysed the data from the PSC to identify trends and patterns.

We note that the structure of the PSC (which comprised a series of 12 simple pseudo-words, followed by 8 simple real words, 8 complex pseudo-words and 12 complex real words), in combination with variation in teacher application of the 'stop' instructions (explained in Section 3.1.3), complicates analysis of the PSC score and its interpretation. In effect, struggling students will drop out earlier in the PSC. Students remaining in the PSC, as it progresses, are more highly skilled and are more likely to correctly pronounce words. In addition, we note that as statistical testing is impacted by sample size, our ability to find statistical difference diminished with the reduction in the number of students attempting words. In the following sections we have presented Means and comparisons for population subgroups and words to assist with understanding the value of the PSC, these should be interpreted with caution and viewed as indicative rather than definitive.

[6] The probability (p) values or limits of what is considered statistically significant are conventionally set at 'p<.05' (significant), 'p<.01' or 'p<.001'(highly significant). The former means there is only a 5 in 100 (5%) chance of this result being a coincidence and the latter meaning only a 1 in a thousand (0.1% chance) of the result being a coincidence.



1.2 Evaluation of teachers' and leaders' experience of implementing the PSC trial in their school

A mixed methods approach has been applied to the evaluation of teachers' and leaders' experience of implementing the PSC trial in their school.

1.2.1 Survey

A confidential survey was developed in collaboration with DECD for teachers and leaders respectively with both designed to maximise response rates. The surveys were administered to 268 teachers and 58 principals and/or leaders[7] across the 56 primary schools participating in the PSC.

The surveys were designed to examine:

- the administration of the Phonics Check, including steps followed in implementing the Check and the time taken to administer the Check;
- the adequacy and clarity of the support materials provided to schools;
- how students responded to the Phonics Check experience e.g. dealing with pseudo-words, distractions and interruptions during testing;
- the potential of the UK Phonics Check to support leaders to monitor and improve phonics development;
- the potential of the UK Phonics Check to inform teaching practices

Surveys were piloted with a small group of DECD staff to ensure clarity of questions and use of terminology, inclusiveness of response categories and that instructions were effective and easily understood. That data collection was undertaken using a secure, encrypted online survey facility.

After the data collection period was closed a complete electronic dataset was generated and downloaded to SPSS statistical software. This dataset was subjected to thorough checking and a data cleaning process, to assess and resolve potential data quality issues such as completeness of responses, validity of responses and consistency of responses.

1.2.2 Interviews

Telephone interviews were undertaken with 20 teachers (eleven Reception, five Year 1 and four Reception/Year 1 teachers) and 10 leaders from a representative sample (i.e. covering a range of metropolitan and regional schools, of varying sizes and demographic characteristics and ICSEA[8] values) of participating DECD schools. To ensure that interview respondents represented a range of PSC performance levels, schools were sorted according to their mean Year 1 PSC score, with every fifth school targeted for contact. A southern metro school and remote school were added to ensure coverage of these regions. Leaders and teachers targeted for interviews were sourced from different schools (i.e. no overlap) to ensure maximum school coverage.

In line with the survey focus areas, interviews were structured to yield *individual and comparative* information about:

- the administration of the Phonics Check;
- the adequacy and clarity of the support materials provided to schools;
- how students responded to the Phonics Check experience;

[7] We note that in one school the principal delegated responsibility for the PSC to another leader, and in another school there was a short-term change of leadership. In both cases two principals and/or leaders were included against the index school. All other schools recorded only one principal and/or leader.

[8] ICSEA refers to the Index of Community Socio-Educational Advantage.

- the potential of the UK Phonics Check to support leaders to monitor and improve phonics development;
- the potential of the UK Phonics Check to inform teaching practices;
- possible concerns from teachers for ongoing implementation of the Phonics Check in their schools, what they feel are the strengths of the Check and any needs identified in order to implement the Check.

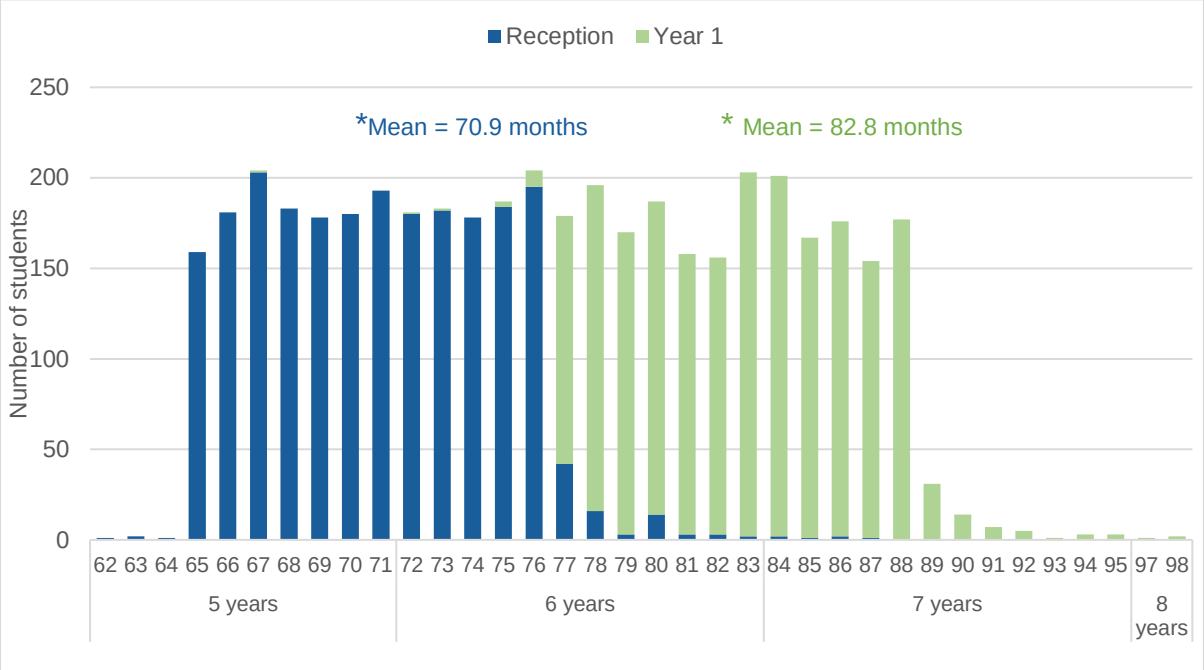
2 Analysis of the Phonics Screening Check results

2.1 Student profile

A total of 4406 students participated in the PSC Trial with tests administered by 268 teachers across 56 schools. The number of students participating in the PSC per school ranged from six through to 225, averaging 79 students per school and just over 16 students per teacher (noting there is likely to be significant variation for the number of students per teacher as well). Just over half (52.0%, n=2289) of students participating in the PSC were from Reception, with the remaining 2117 (48.0%) from Year 1.

The ages of Reception students ranged from 62 to 87 months (see Figure 1) with an average of 70.9 months (almost 6 years). Year 1 students were an average of one year older at 82.8 months (almost 7 years), with ages for this cohort ranging from a low of 67 through to 98 months.

Figure 1: PSC - Distribution of students by age by year level

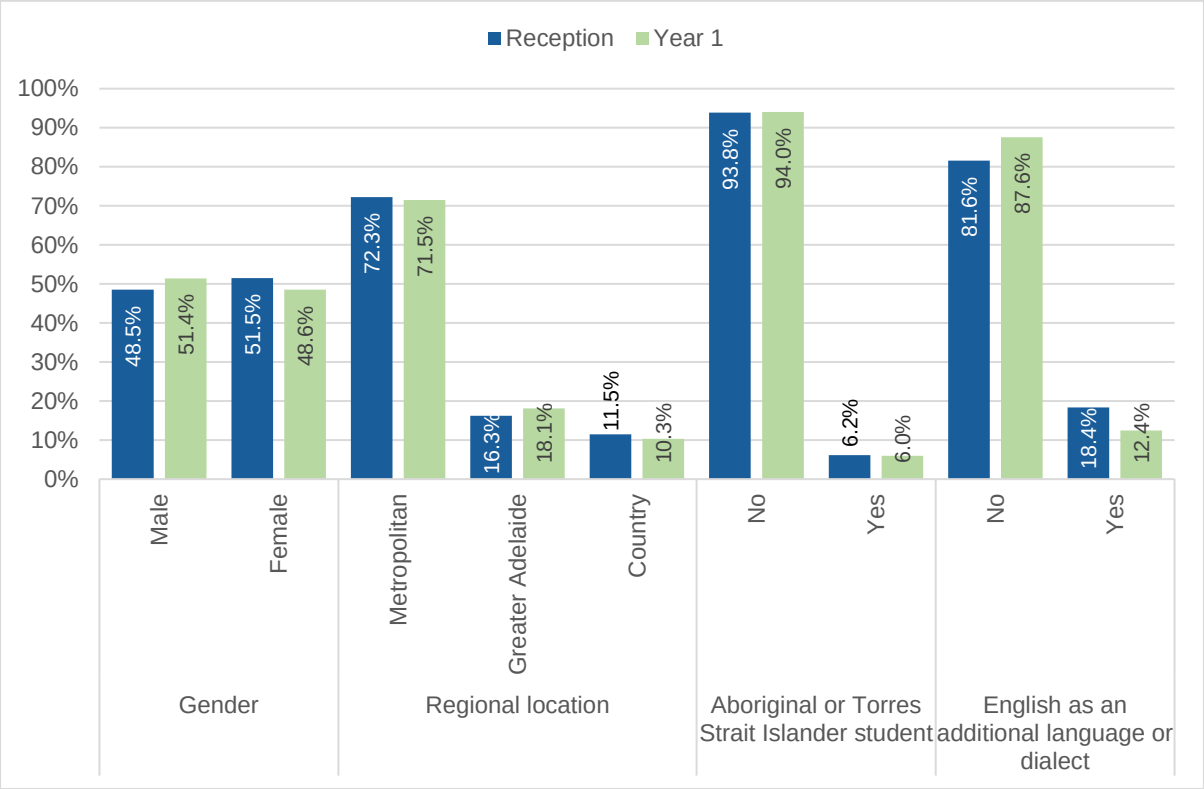


Males (49.9%) and females (50.1%) were evenly distributed between Reception and Year 1 with slight variations not proving statistically significant. Students from metropolitan schools (71.9%) made up the largest proportion of PSC participants, followed by 17.2% of students from Greater Adelaide and 10.9% from country schools - again with no statistical differences between the year levels. Aboriginal and/or Torres Strait Islander students contributed 6.1% of the participant population. Statistically more Aboriginal and Torres Strait Islander students (15.4%) were from country schools, compared with 4.9% from metropolitan schools[9]. There was also a statistically higher proportion of Reception students qualifying for English as an additional language or dialect (EALD) funding than Year 1 students (18.4% compared with 12.4%, respectively; see

[9] X^2 (2, N=4406)=82.1, p<.001.

Figure 2)[10]. In addition, a statistically higher proportion of metropolitan (19.0%) students had EALD, compared with students from greater Adelaide (3.8%) and country (11.0%) schools[11].

Figure 2: PSC - Distribution of students by gender, region, Aboriginality and EALD status, by year level



2.2 Phonics programs used in schools

Teachers and leaders participating in the PSC were asked to indicate the extent to which synthetic, analytic and incidental approaches were currently used in teaching phonics. There was general agreement between teachers and leaders in the degree to which synthetic and analytic approaches were used (see Figure 3). Synthetic approaches were used most to all of the time (accounting for 96.4% of leaders, and 80.5% of teachers; see Figure 4); while analytic approaches were used somewhat less with only 28.6% leaders and 35.3% of teachers reporting it was used most to all the time (see Figure 5). Of note, teachers indicated an incidental approach was used statistically more than leaders.[12] Two in five (42.9%) leaders indicated an incidental approach was never used in their school compared with one in seven (14.3%) teachers; no leaders were unsure about whether this approach was used, compared with one in ten teachers (see Figure 6).

[10] X^2 (1, N=4406)=29.9, p<.001.
[11] X^2 (2, N=4406)=115.5, p<.001.
[12] t(76.9)=5.5, p<.001

Figure 3: Survey – Phonics teaching approach currently used in school, by role ($\overline{X}$)

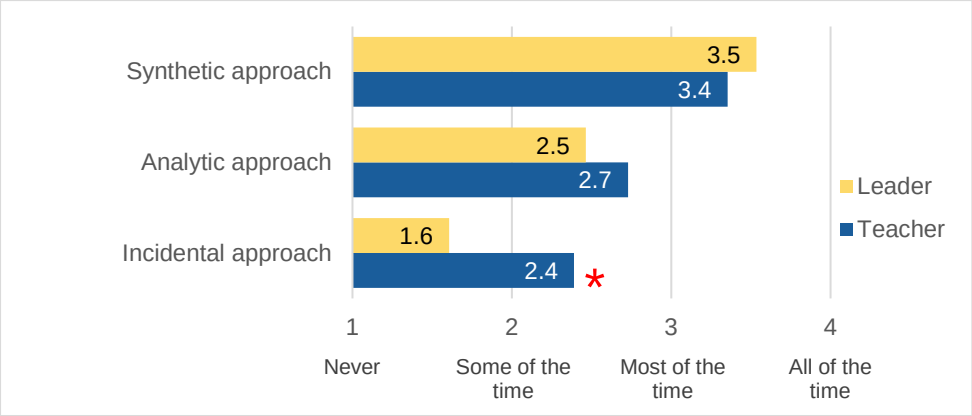


Figure 4: Survey – Synthetic phonics approach currently used by school, by role (%)

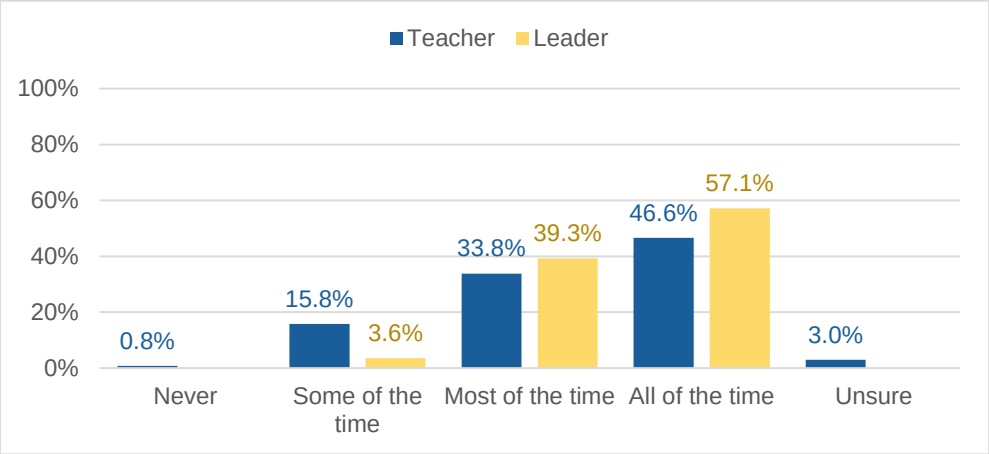


Figure 5: Survey - Analytic phonics approach currently used by school, by role (%)

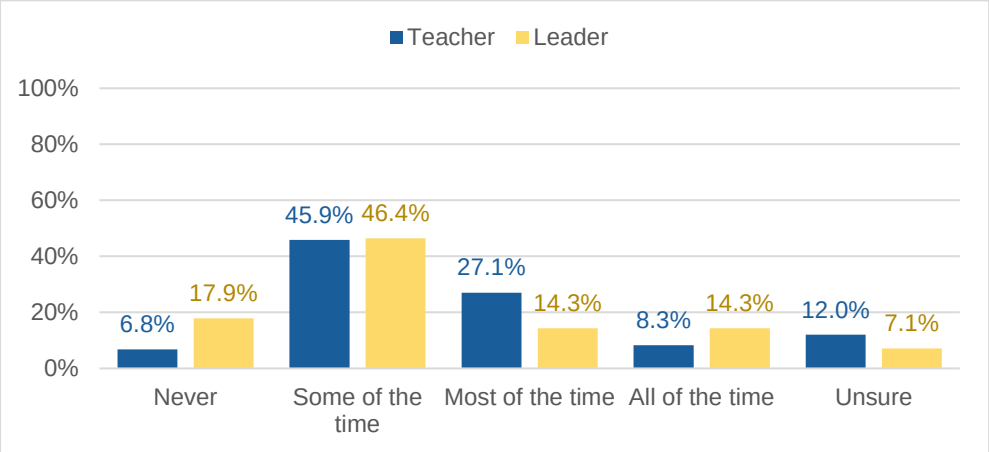
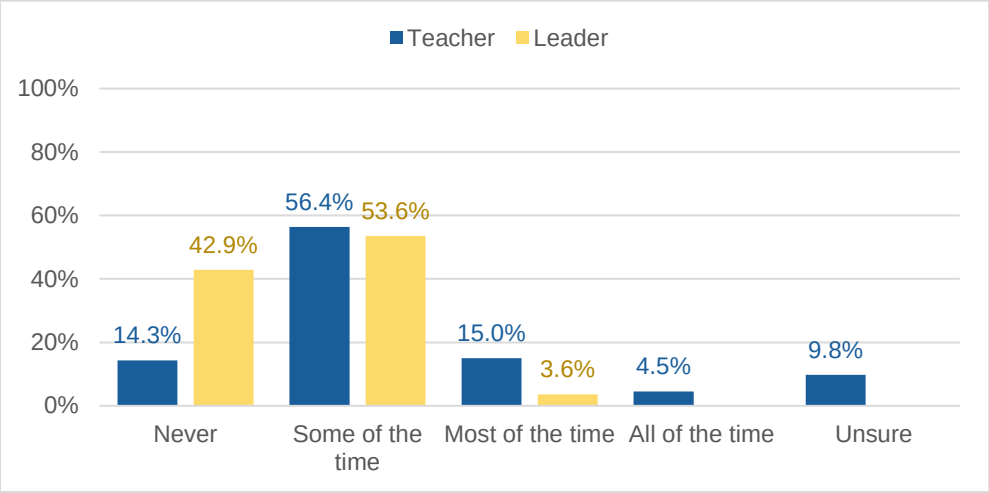
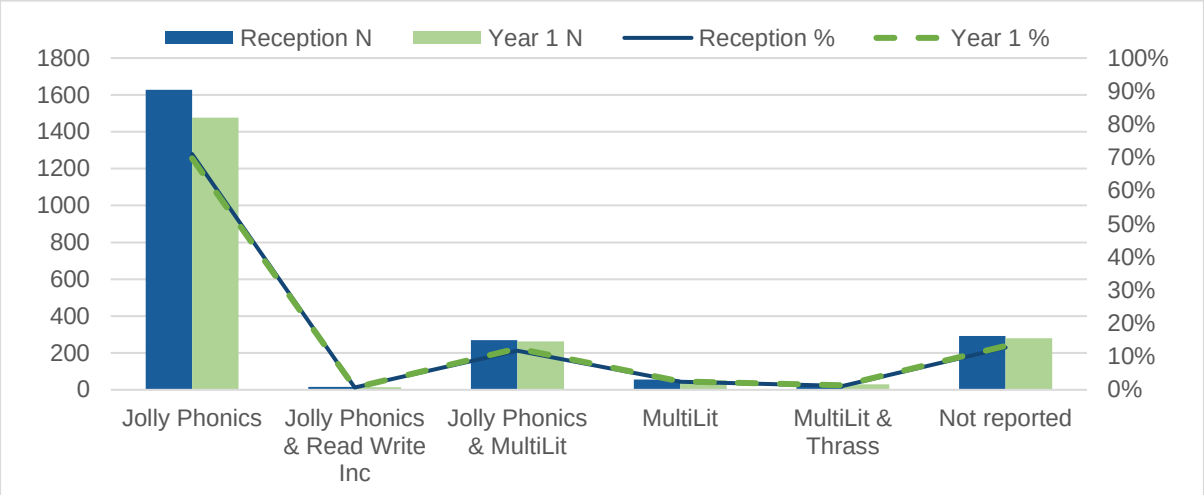


Figure 6: Survey - Incidental phonics approach currently used by school, by role (%)



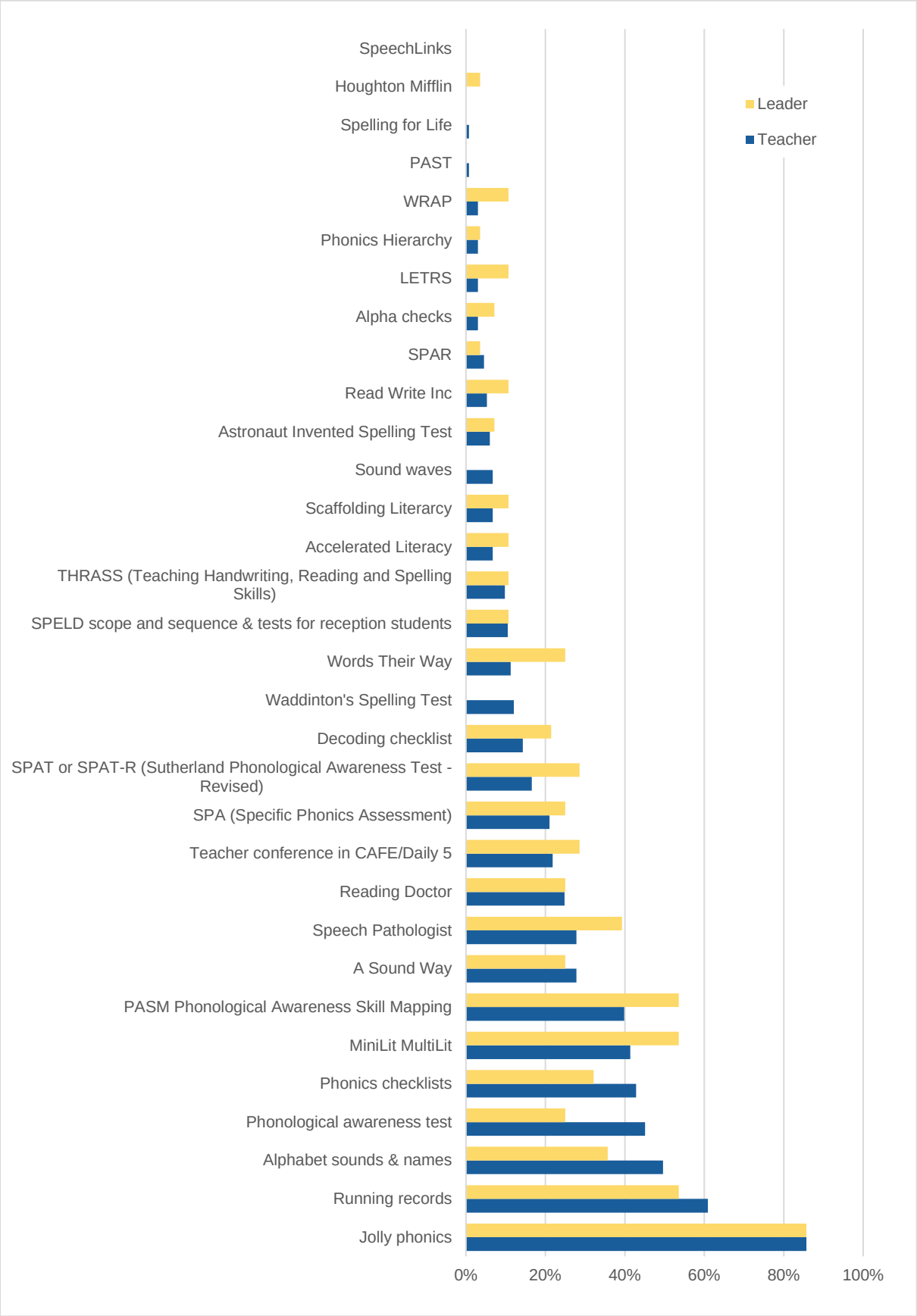
As part of the PSC, teachers indicated which phonics program was used with the student. More than four in five (83.2%) students were taught phonics using the Jolly Phonics program exclusively or in combination with other programs (see Figure 7). MultiLit was used for 15.9% of participants, with three quarters of these also using Jolly Phonics. Information about the phonics program being used was not available for 13.0% of participants. There were no year level differences in the types of phonics program used.

Figure 7: PSC - Phonics program used by year level



Teachers and leaders were asked to indicate which of a list of phonics resources they found most useful. Jolly Phonics was rated useful by almost twice as many teachers (85.7%) and leaders (85.7%) as other resources, with running records the main exception endorsed by 60.9% of teachers and 53.6% of leaders (see Figure 8). Given the above findings that Jolly Phonics was used (by itself or in combination with other programs) by almost all participating teachers this finding is not unexpected. In addition to the list resources, a few teachers and leaders mentioned Letters and Sounds, Spalding, and Speech Sound Pics as useful resources.

Figure 8: Survey – Resources considered the most useful in the teaching of phonics, by role (%)



Note, multiple responses are possible.

2.3 Analysis of PSC words

2.3.1 Year level

The number of words correctly pronounced varied statistically by year level with Reception students ($\overline{X}$=10.8) pronouncing fewer than half the words correctly of Year 1 students ($\overline{X}$=22.4)[13]. This is also evident in Figure 9 which shows the numbers of words correct by year level and demonstrates that the words used in the PSC are suitable to differentiate between the phonics skills of Reception and Year 1 students. We note, just over one fifth (21.5%) of Reception students were unable to correctly pronounce any word compared with one in twenty-four (4.2%) Year 1 students. At the other end of the scale, only one in fifty (1.9%) Reception students correctly pronounced between 36 and 40 words - compared with one in six (17.0%) Year 1 students.

Figure 9: PSC - Number of correctly pronounced words by year level

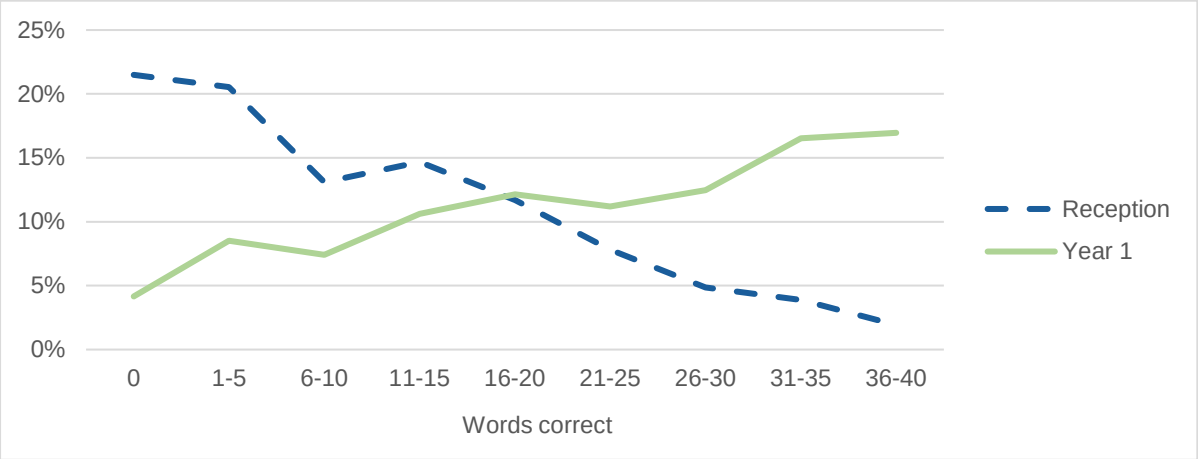


Figure 10 and Figure 11 present the number of words attempted, the number correct and the proportion of correct words for Reception and Year 1 students, respectively. A total of 4406 students, 2289 Reception and 2117 from Year 1, participated in the PSC, which began with twelve simple pseudo-words. Almost all (98-99%) students attempted the first three words which were pronounced correctly by approximately three in five Reception students and four in five Year 1 students. There was a sharp decline in the proportion of Reception students engaged in the PSC for the next three words with only three quarters (75.8%) of these students attempting SHUP [6][14] and only two thirds of these correctly pronouncing it. In contrast 93.8% of Year 1 students attempted SHUP [6], with the proportion of correct responses remaining high at 82.8%.

DOIL [7] proved problematic for both year levels. Three quarters of Reception students attempted the word – but only one in five of these had correct pronunciations. Of Year 1 students, 92.8% of students attempted the word with only two in five of these pronouncing the word correctly. CHARB [8] and BARST [12] proved most challenging of the remaining simple pseudo-words, with only two in five Reception students and three in five Year 1 students correctly pronouncing them. At the other end of the scale, HAPS [11] was pronounced correctly by 71.4% of Reception students and 86.9% of Year 1 students who attempted it – with proportionally more students correct than any other word.

[13] t(4167)=-34.4, p<.001

[14] All words from the PSC will be capitalized when appearing in the text and followed by a number indicating their place in the PSC. For example, the sixth word in the PSC is presented as: SHUP [6].

Response rates rebounded to 91-92% for Reception students and 98% for Year 1 students for the first three of the eight simple real words[15]. Of those attempting the first of these words, CHIN [13] was pronounced correctly by three in five (61.3%) Reception students and 84.8% of Year 1 students. DECK [14] and HORN [15] proved the most difficult in this collection of simple real words, correctly pronounced by 41-47% of Reception students and 71-74% of Year 1 students reading them. We note that of all the words in the PSC, QUEEN [16] is likely to be the most familiar to young students as it is commonly used in alphabet games, songs and flash cards. This is likely to account for the comparatively high proportion of Reception (63.1%) and Year 1 (86.3%) students pronouncing it correctly.

JIGH [21] was the first of the eight complex pseudo-words. By this point 88% of Year 1 were still engaged with the PSC, but significantly fewer Reception students were - only 57%. There was a significant decline in the proportion reading these words and pronouncing them correctly with JIGH [21] and RIRD [23] pronounced correctly by only 14% of Reception students reading them, compared with approximately 32% of Year 1 students. In contrast GLIPS [25] was correctly pronounced by 65% of Reception students attempting the word and 79% of Year 1 students, noting by this word only one third of Reception students and seven in ten Year 1 students were participating. Pronouncing JIGH [21] proved amongst the most problematic for both Reception and Year 1 students. RIRD [23] and PHOPE [24] proved difficult for a similar proportion of Reception students, and RIRD [23] challenged a similar proportion of Year 1 students. Only 30.5% of Reception students and 69.0% of Year 1 students attempted the final word in the set of complex pseudo-words - STRIBE [28].

On commencement of the final series of twelve complex real words, participation rebounded for to 48.4% for Reception students and more than 82.8% for Year 1 students. In this set of words, HAUNT [30] proved the most difficult with only 4.8% and 20.0% of attempting Reception and Year 1 students respectively pronouncing the word correctly. Low accuracy for the first three words meant participation dropped for WOVE [32] (29.8% Reception; 70.2% Year 1) before steadily declining across the remaining words down to the final word BRIGHTER [40] attempted by 22.0% of Reception students and 62.8% of Year 1 students. Although attempted by a relatively low proportion of students, WISHING [39] was correctly pronounced by a comparatively high proportion of both Reception (56.9%) and Year 1 (84.5%) students.

Figure 12 presents the proportion of Reception and Year 1 students with correct pronunciation for those who attempted the word. All words were pronounced correctly by statistically more Year 1 than Reception students. On average 616 (26.9%) of all Reception students correctly pronounced each word, compared with 1184 (55.9%) of all Year 1 students. Reception students were most likely to pronounce simple pseudo-words BEFF[5], SHUP [6] and HAPS [11] correctly with 69-71% of Reception students correct in their attempts. While usually strong with the simple pseudo-words, including HAPS [11] (87%), two of the three words with most correct attempts by Year 1 students were simple real words – CHIN [13] (85%), QUEEN [16] (86%).

Of all correct attempts at words, proportionally fewer correct responses were received from Reception students for PHOPE [24] (13%), HAUNT [30] (13%) and BRIGHTER [40] (15%). Reception and Year 1 students had most difficulty with the following complex words: HAUNT [30] (5% and 20% correct, respectively), JIGH [21](14% and 34%, respectively) and RIRD [23] (14% and 31%, respectively) – with Reception students also struggling with PHOPE [24] (12%) and STAIR [29] (14%).

[15] We note that a strict adherence to the stop instructions would have meant all students should have recommenced the PSC from this point. See 3.1.3 for stop instructions.

Figure 10: PSC - Number of words attempted, number correctly pronounced and proportion correctly pronounced, by Reception students

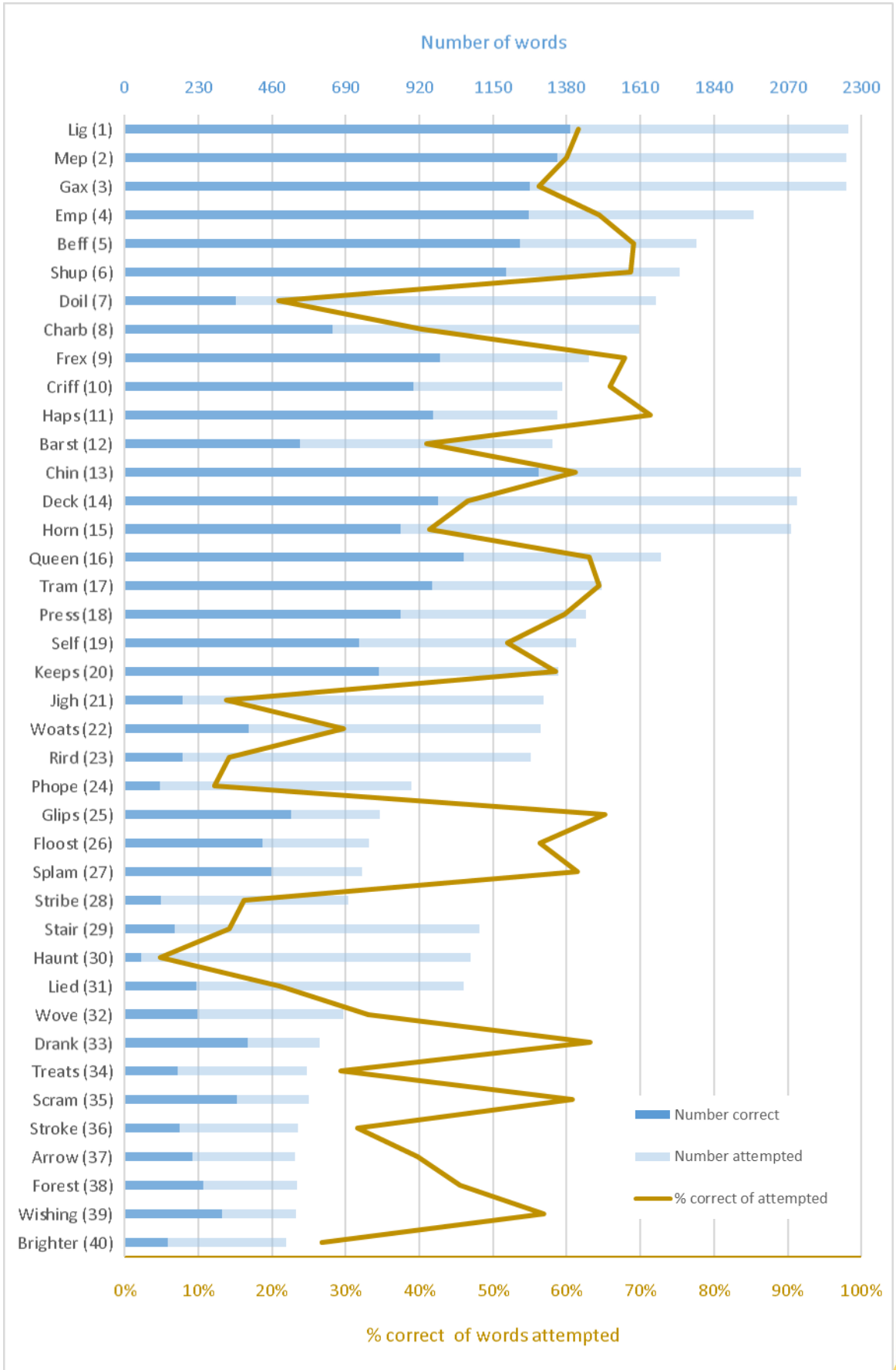


Figure 11: PSC - Number of words attempted, number correctly pronounced and proportion correctly pronounced, by Year 1 students

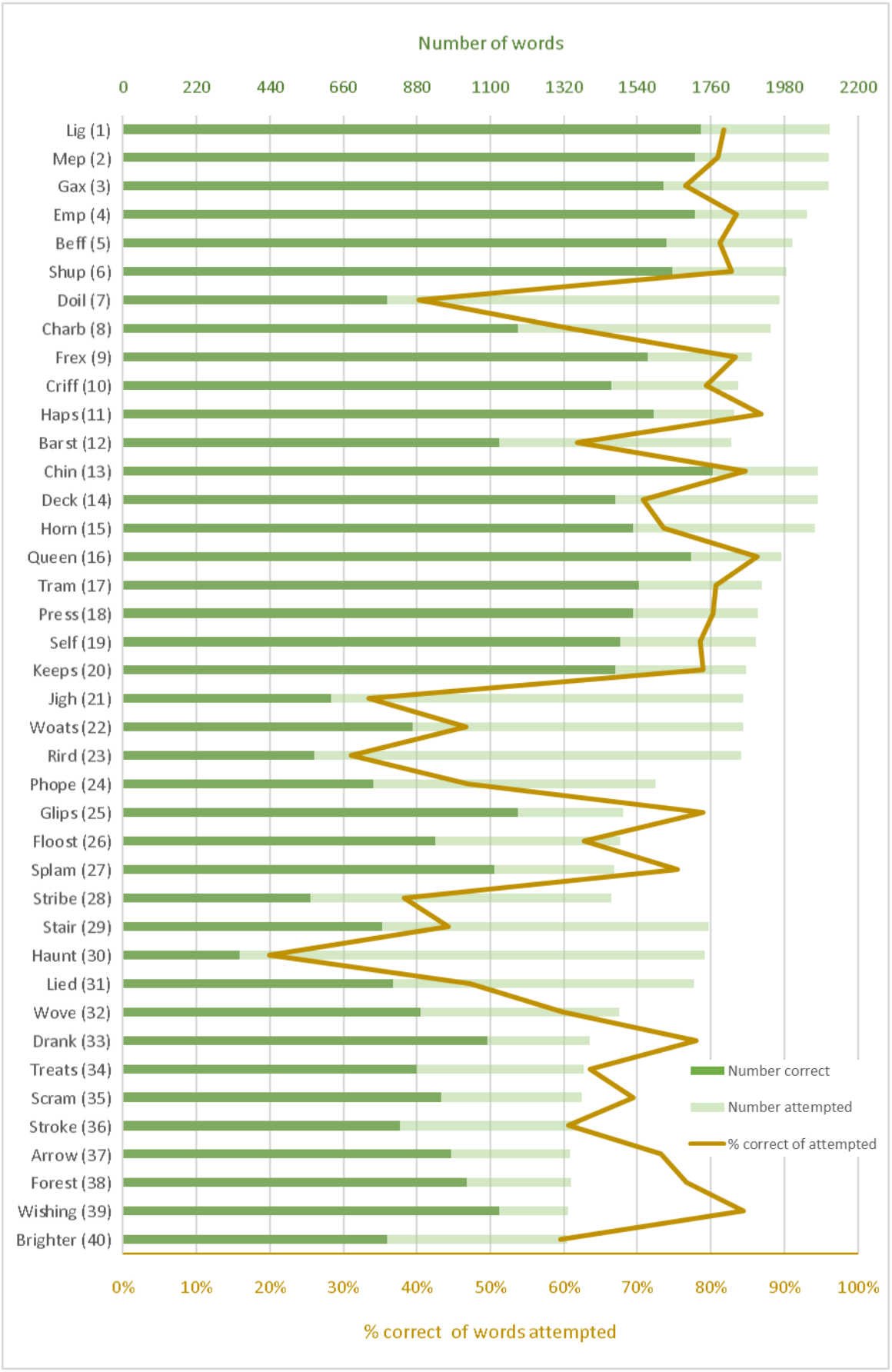
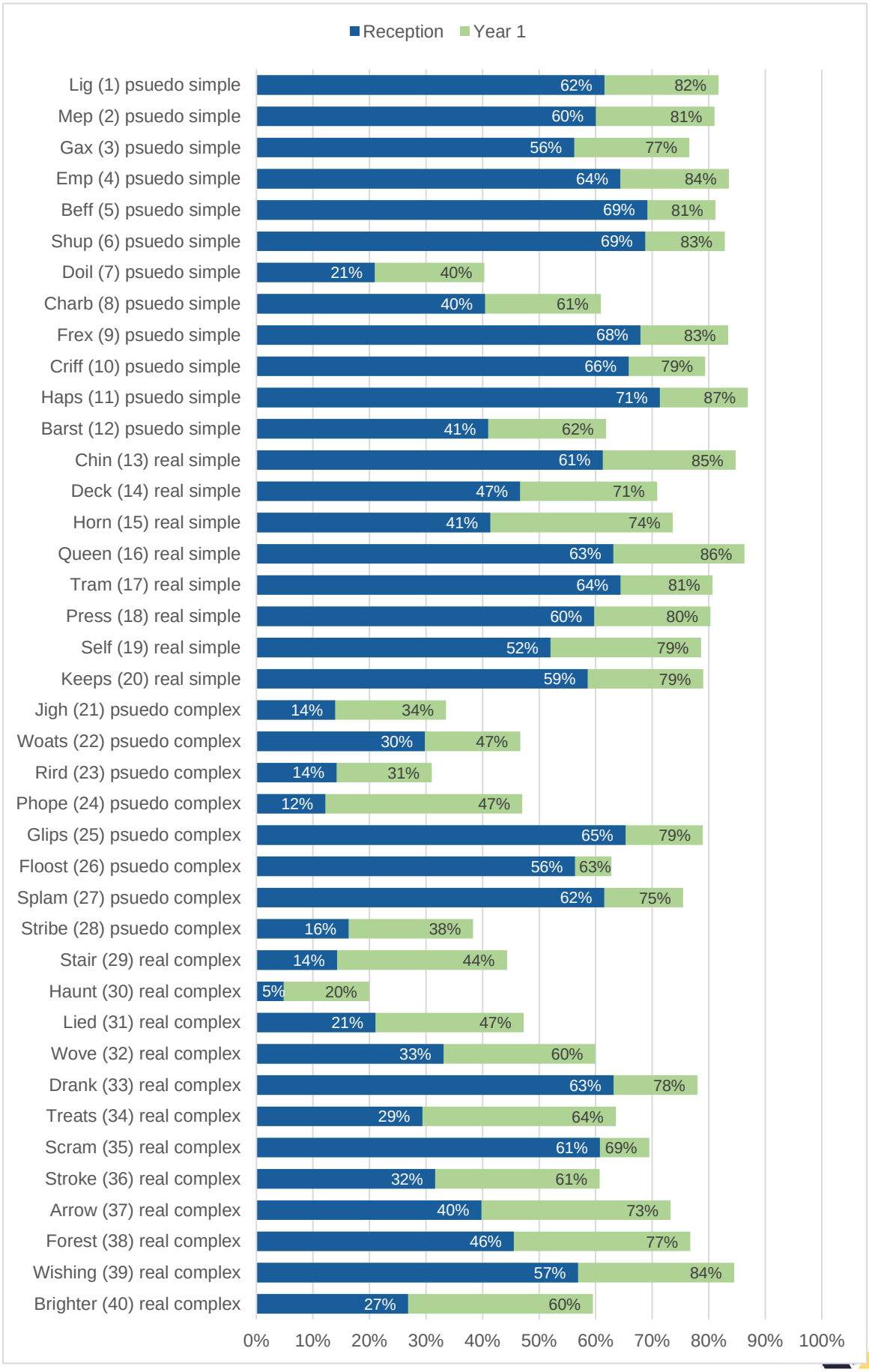


Figure 12: PSC - Proportion of students attempting words achieving correct pronunciation, by year level



2.3.2 Gender

Relatively small differences were evident by gender with females correctly pronouncing statistically more words than males in both Reception ($\overline{X}$=11.3, compared with $\overline{X}$=10.2)[16] and Year 1 ($\overline{X}$=23.0, and $\overline{X}$=21.7, respectively; see Figure 13).[17] Most of this discrepancy lies in the difference between students who were unable to answer any words correctly. Male Reception students had the most difficulty pronouncing words with one quarter (25.3%) recorded with no correct pronunciations (see Figure 14). Female Reception students fared better as 17.9% were without a correct pronunciation. Year 1 male students were twice as likely as their female classmates to have no correct pronunciations recorded, however, rates were low with one in twenty (5.7%) males and one in forty (2.5%) females falling into that category.

Figure 13: PSC - Mean number of correctly pronounced words, by year level and gender

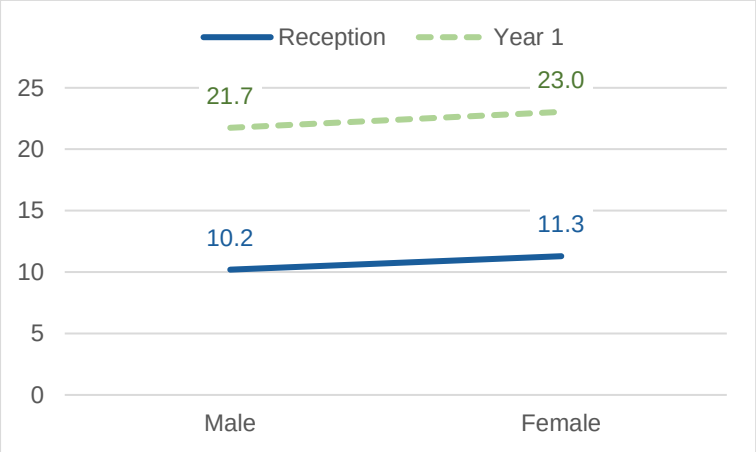
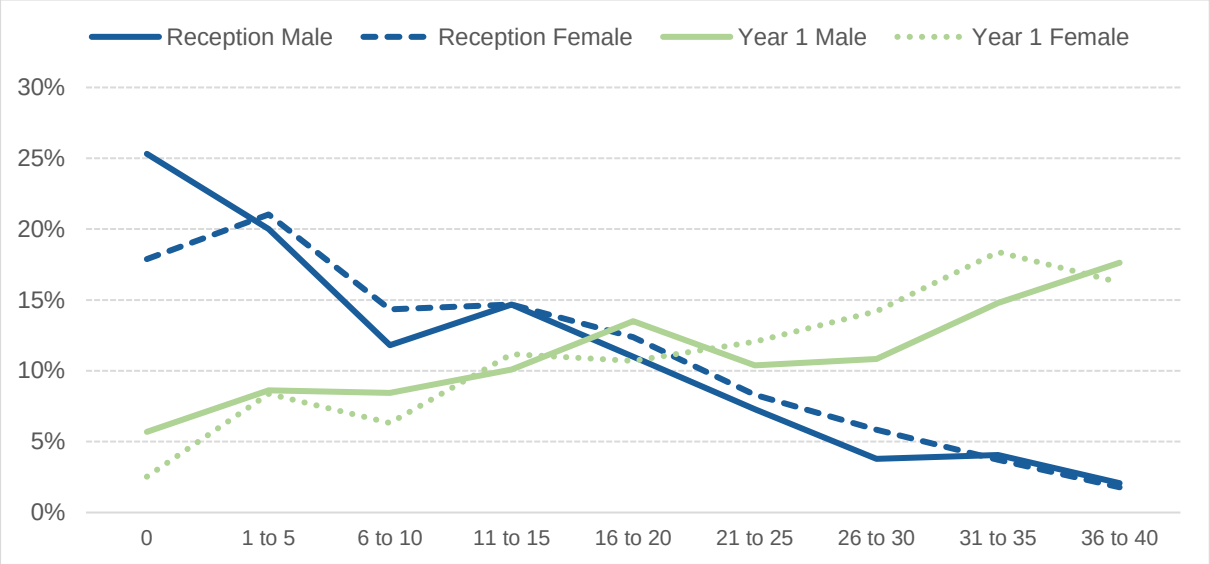


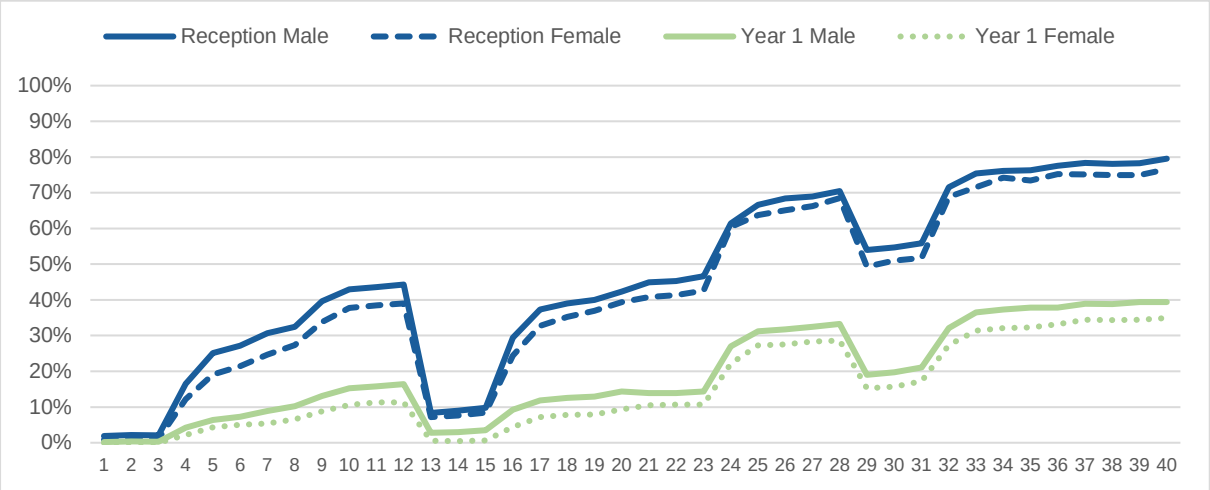
Figure 14: PSC - Number of correctly pronounced words, by year level and gender



As previously discussed, Reception students were less likely to attempt words compared with Year 1 students. Figure 15 shows that males were slightly less likely to attempt words than females – varying up to five percentage points - with early male discontinuances from both Reception and Year 1 creating the margin of difference that can be seen across the PSC.

[16] t(2287)=-2.6, p<.05
[17] t(2114)=-2.5, p<.05

Figure 15: PSC - Proportion of students not attempting words, by year level and gender

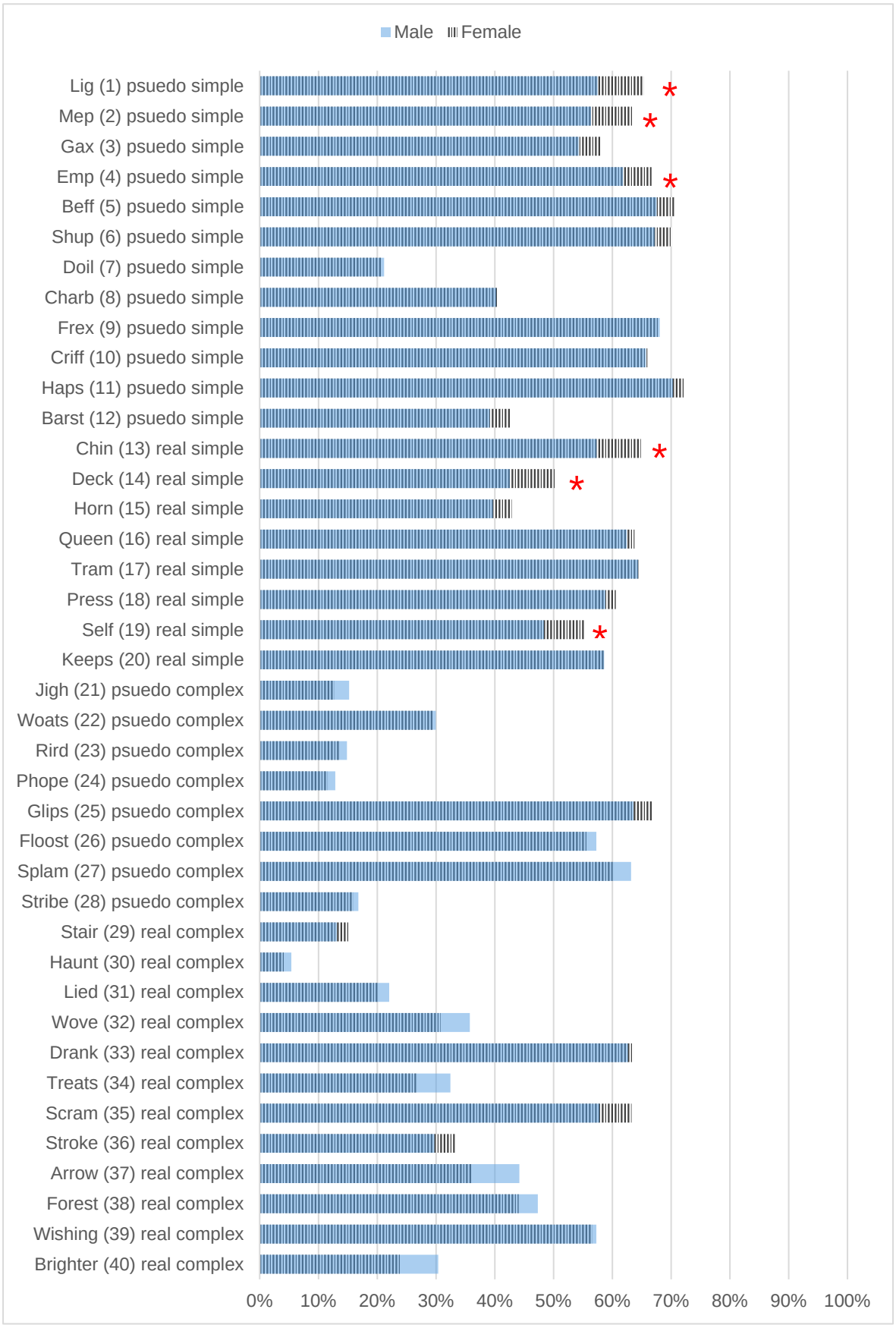


The proportion of correct pronunciations for students attempting each word is presented in Figure 16 for Reception students and Figure 17 for Year 1 students. For Reception students statistical differences between males and females were evident for simple pseudo-words LIG [1], MEP [2], and EMP [4], and for simple real words CHIN [13] and DECK [14], with females consistently achieving more correct pronunciations. It is evident that differences were strongest between the genders at commencement of each set of simple words (pseudo and real), with the decline in statistical gender differences corresponding with the lower rate of male participation.

For Year 1 students, there was a statistical difference for BARST [12] with females more likely than males to pronounce the final simple pseudo-word correctly. Statistically more females also pronounced simple real words CHIN [13] and HORN [15] correctly, as well as complex real word WISHING [39]. Complex real word HAUNT [30] and complex pseudo-word RIRD [23] were poorly pronounced overall, but were statistically more likely to be pronounced correctly by males than females.

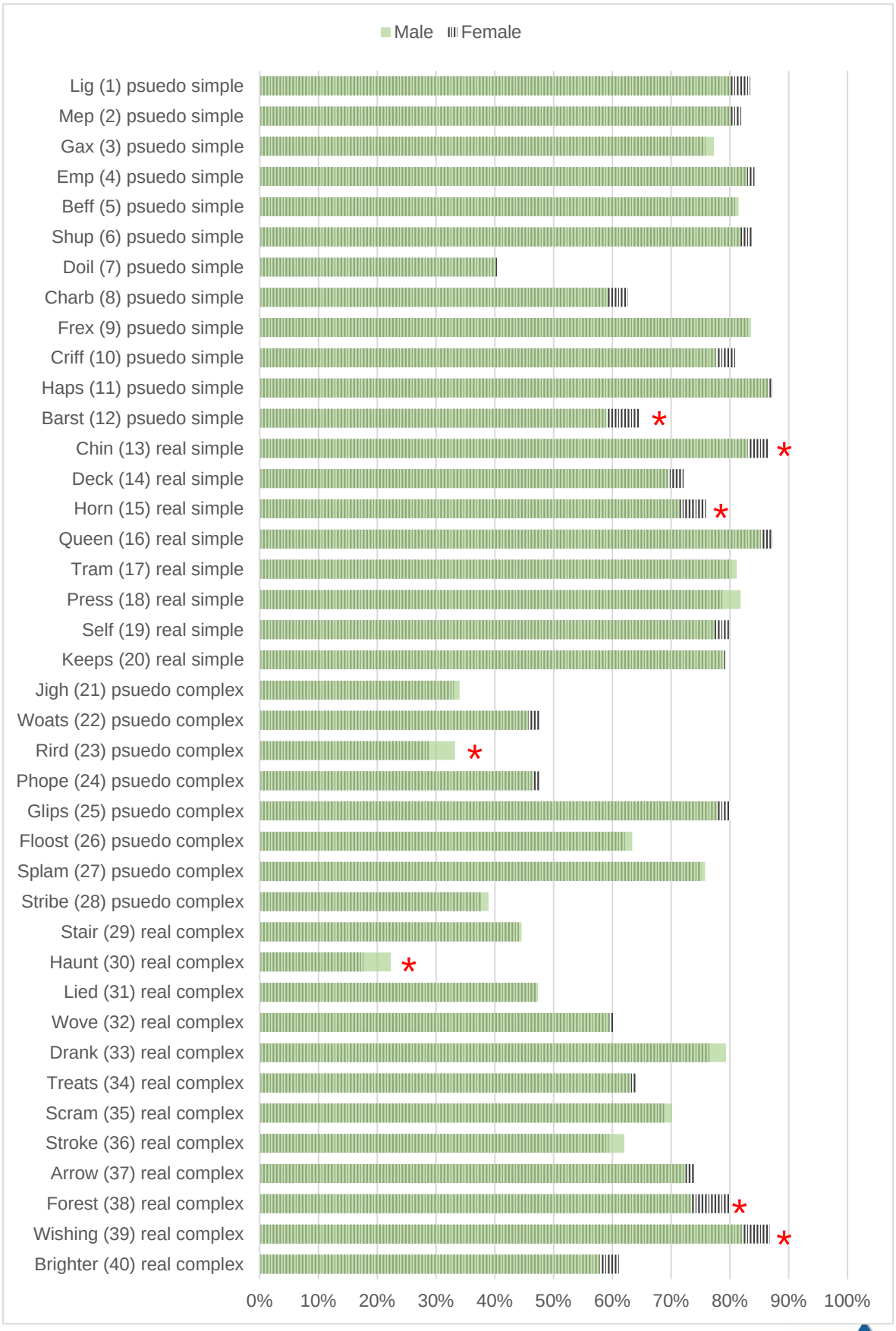
As previously mentioned statistical testing is impacted by sample size affecting our ability to identify statistical difference as the number of students attempting words decreased. By the final word in the PSC, Year 1 participation had declined to 660 males and a similar number of females (n=669). However, only 227 male Reception students completed the PSC, with slightly more, n=276, female Reception students. This was likely to account for fewer gender differences in Reception students pronunciations for complex words in the second half of the test.

Figure 16: PSC - Proportion of Reception students attempting words and achieving correct pronunciation, by gender



** indicates statistical differences were found*

Figure 17: PSC - Proportion of Year 1 students attempting words and achieving correct pronunciation, by gender

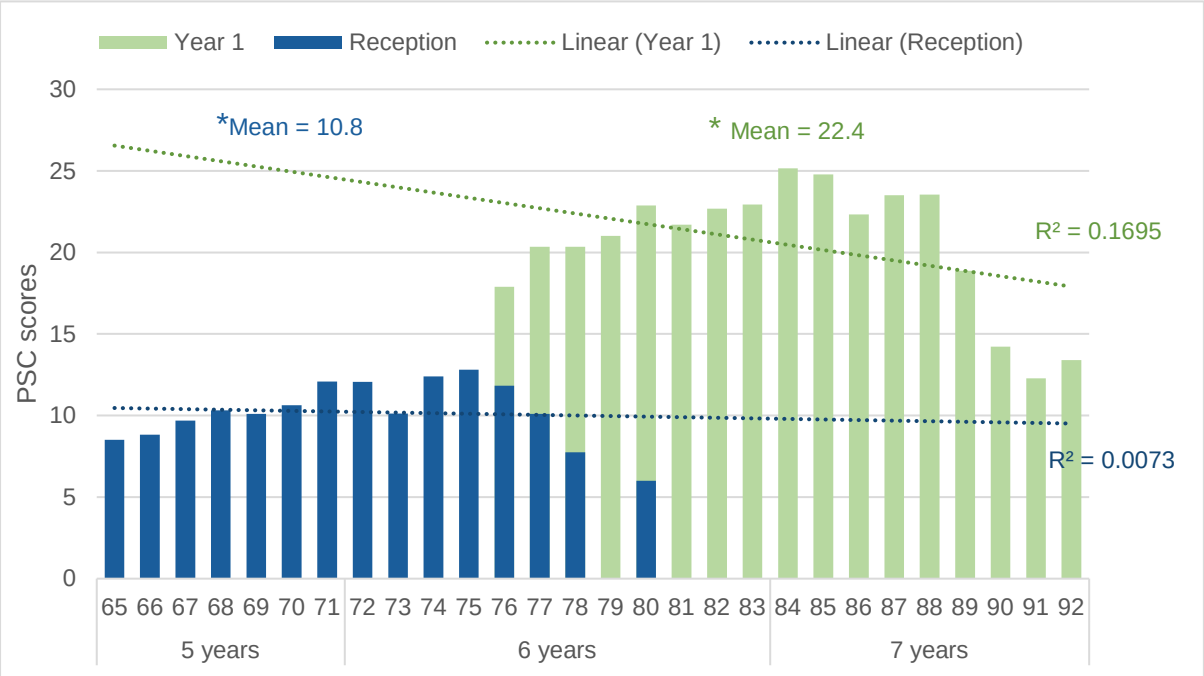


** indicates statistical differences were found*

2.3.3 Age

The distribution of student PSC scores by age in months is presented in Figure 18. This shows there is a bell-shaped curve for the scores in each year level, with lowest PSC results in the youngest and oldest members of the cohort. Trend lines show there is no real age effect for Reception students, whereas age accounted for 17% of the variance in PSC performance in Year 1. We draw attention to the tails in each distribution which show a decline in PSC scores for the oldest members of the year level groups. This suggests that some students who commence late or are held back do not achieve the same level of phonics attainment as their classmates during the first two years of school.

Figure 18: PSC - Distribution of student PSC scores by age by year level



Note, age groups with less than n=5 are excluded

2.3.4 Location

Schools

Fifty-six schools participated in the PSC[1], all of which included Reception students in the testing, with all but three schools including Year 1 students. East Adelaide (n=225), Glenelg Primary (n=215) and Stradbroke schools (n=208) accounted for almost 650 participating students (see Table 1 and Appendix B). At the other end of the scale Brinkworth Primary (n=6), Koolunga Primary (n=10) and Blyth Primary (n=11) provided the lowest number of students engaged in the PSC.

We note that PSC school Mean ratings are impacted by how teachers applied the stop instructions (see Section 3.1.3) with decisions about this application being made by teachers rather than schools. Therefore, *we suggest results should be viewed as indicative rather than definitive*.

Mean PSC scores for Reception students ranged from a low of 1.4 in Augusta Park Primary through to a high of 22.2 in Willunga Primary. Augusta Park Primary also scored lowest in Year 1 with a Mean of 7.6, while four schools achieved Year 1 scores above 30 – Birdwood Primary ($\overline{X}$=31.5), Nailsworth Primary ($\overline{X}$=30.9), Goodwood Primary ($\overline{X}$=30.7) and Streaky Bay Area

School ($\overline{X}$=30.1). We note that Augusta Park Primary reported the highest proportion (58.5%) of Aboriginal and Torres Strait Islander students and second highest proportion (56.6%) of students qualifying for EALD funding. However, while comprised of very few Aboriginal and Torres Strait Islander students, Goodwood Primary and Nailsworth Primary had high proportions of EALD students (38.7% and 27.3%, respectively).

There was a clear trend for schools with high scores in Reception to also have high scores in Year 1. Anomalies in this regard are Hincks Avenue Primary which was in the top quintile for Reception students ($\overline{X}$=13.3) but in the bottom quintile for Year 1 students ($\overline{X}$=14.8) and Gawler East Primary which was in the bottom quintile for Year 1 ($\overline{X}$=16.6) but in the fourth quintile for Reception ($\overline{X}$=13.1).

Schools were allocated to three regions as per DECD boundaries with the distribution of students between the regions presented in Figure 2. Analysis of regional differences for PSC results are presented below.

Table 1: PSC – number of students, Mean number of correctly pronounced words and Quintile, by participating school

	Reception			Year 1		
	N	Mean	Quintile	N	Mean	Quintile
Aldinga Beach B-7 School	99	7.5	2	61	16.5	1
Ardtornish Primary School	70	16.8	5	68	29.7	5
Augusta Park Primary School	33	1.4	1	20	7.6	1
Barmera Primary School	20	4.9	1	30	18.0	2
Birdwood Primary School	29	12.5	4	24	31.5	5
Blyth Primary School	5	11.6	4	6	27.5	5
Brinkworth Primary School	6	10.2	3	0		
Challa Gardens Primary School	48	5.8	1	44	18.9	2
Crafers Primary School	37	10.9	4	36	26.6	4
Craigmore South Primary School	28	9.6	3	31	24.6	4
Darlington Primary School	15	3.9	1	23	19.9	2
East Adelaide School	116	10.5	3	109	25.0	4
East Para Primary School	44	8.5	2	52	17.2	2
EFS Strathalbyn R-6 Campus	63	11.4	4	77	21.5	3
Elizabeth Grove Primary School	23	10.4	3	21	19.1	2
Elizabeth Park Primary School	44	4.1	1	46	12.3	1
Elizabeth Vale Primary School	40	11.0	4	39	20.7	3
Evanston Gardens Primary School	24	8.1	2	14	15.9	1
Gawler & District College B-49	34	7.0	2	29	19.2	2
Gawler East Primary School	36	13.1	4	43	16.6	1
Gilles Street Primary School	28	4.1	1	30	20.8	3
Glenelg Primary School	122	9.7	3	93	22.7	3
Goodwood Primary School	60	13.5	5	51	30.7	5
Goolwa Primary School	25	11.7	4	30	21.9	3
Hawthorndene Primary School	44	15.6	5	45	29.0	5
Henley Beach Primary School	56	20.6	5	53	29.9	5
Hincks Avenue Primary School	16	13.3	5	14	14.8	1
Ingle Farm Primary School	53	8.5	2	62	16.8	1
Kangaroo Island Community Ed	49	13.4	5	54	21.5	3
Kimba Area School	22	9.3	3	15	24.9	4
Koolunga Primary School	6	10.3	3	4	19.5	2
Lake Windemere B-7 Schools	69	4.8	1	69	11.7	1
Littlehampton Primary School	49	9.8	3	52	23.6	4
Loxton Primary School	42	6.5	2	45	19.8	2
Madison Park Primary School	24	8.6	3	24	21.7	3
Marion Primary School	29	13.2	5	23	25.0	4
McLaren Vale Primary School	69	21.9	5	66	26.5	4
Modbury South Primary School	13	6.4	2	20	18.3	2
Mount Barker South Primary School	26	17.3	5	25	26.8	4
Nailsworth Primary School	62	18.3	5	70	30.9	5
Nicolson Avenue Primary School	48	10.0	3	51	15.7	1
North Ingle School	26	8.4	2	15	18.0	2
O'Sullivan Beach Primary School	17	6.2	2	6	18.7	2
Port Broughton Area School	21	13.1	4	0		
Prospect Primary School	70	11.7	4	60	26.2	4
Renmark North Primary School	25	4.8	1	14	9.4	1
Salisbury Downs Primary School	42	3.0	1	46	20.5	3
Seaford K-7 School	33	8.2	2	38	20.2	3
South Downs Primary School	20	6.8	2	17	13.8	1
St Leonards Primary School	47	5.2	1	0		
Stradbroke School	115	13.9	5	93	28.7	5
Streaky Bay Area School	19	13.1	4	20	30.1	5
Sturt Street Community School	23	12.0	4	22	22.9	3
Surrey Downs R-7	23	6.1	1	24	22.6	3
Warradale Primary School	41	8.9	3	42	24.4	4
Willunga Primary School	41	22.2	5	51	26.1	4

Region

There was no statistical difference for the Mean number of correctly pronounced words between metropolitan and Greater Adelaide students in either Reception ($\overline{X}$=11.0 and $\overline{X}$=11.5, respectively) or Year 1 ($\overline{X}$=23.0 and $\overline{X}$=22.3, respectively). However, country students pronounced statistically fewer words correctly in both Reception ($\overline{X}$=8.2) and Year 1 ($\overline{X}$=18.0) than metropolitan students (see Figure 13)[18]. Most of this difference is accounted for by the high proportion of students from country schools (54.0% from Reception and 22.8% from Year 1) who correctly pronounced five or fewer words (see Figure 20). This can be compared with 41.5% of metropolitan school students and 35.8% of Reception students from Greater Adelaide schools, and 12.0% metropolitan and 9.6% of Greater Adelaide Year 1 students.

Figure 19: PSC - Mean number of correctly pronounced words, by year level and region

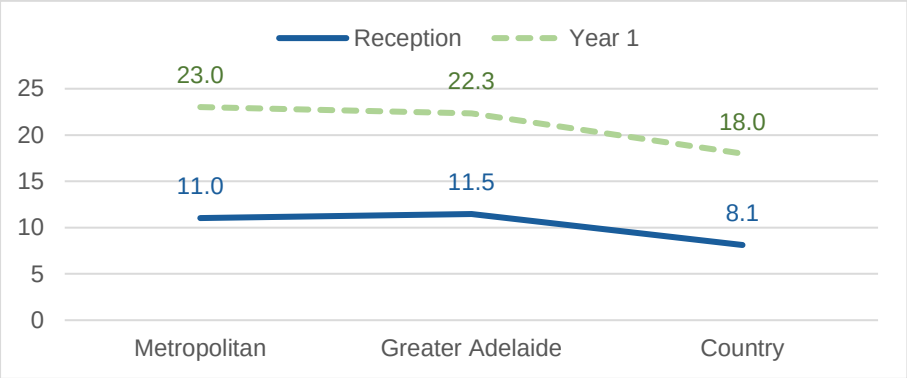
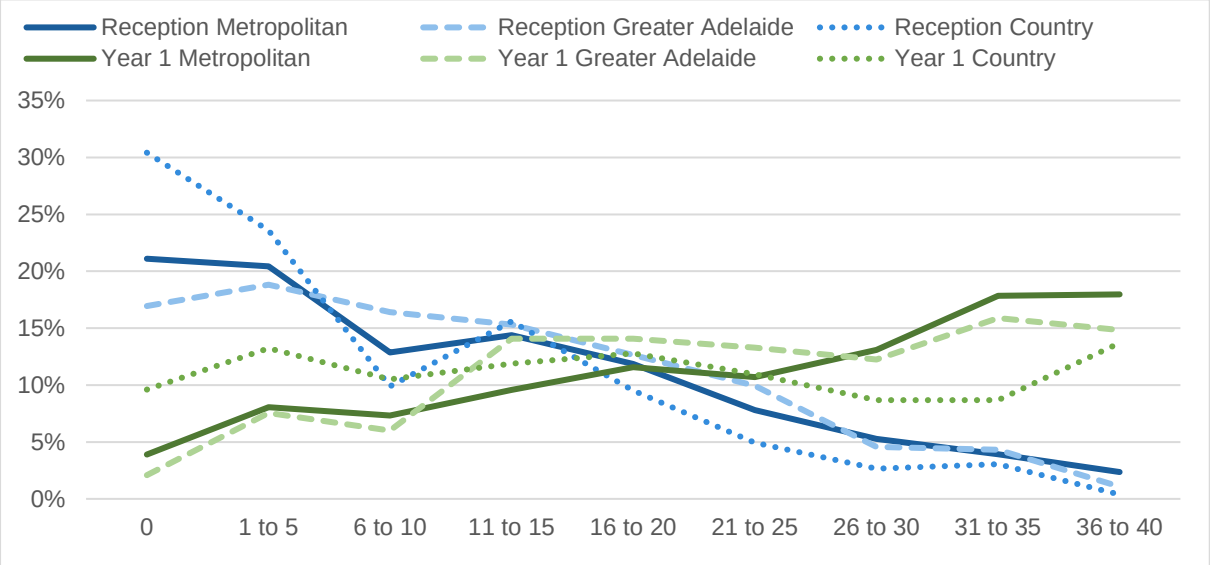


Figure 20: PSC - Number of correctly pronounced words, by year level and region

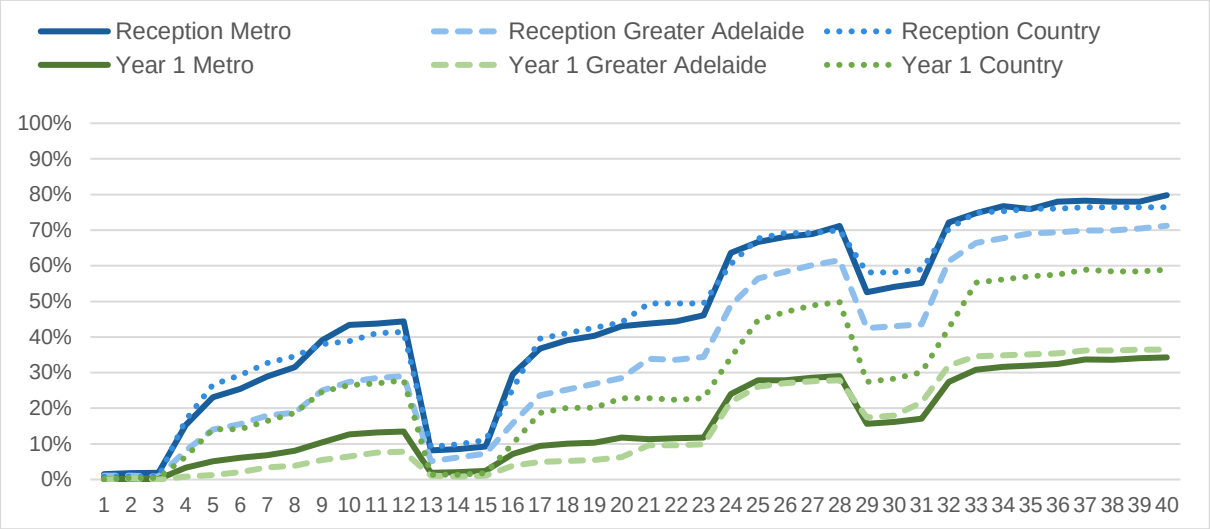


A similar proportion of Year 1 metropolitan and Greater Adelaide students attempted each word, culminating in approximately two thirds of these students attempting all words (see Figure 21). Double the proportion of country Year 1 students were no longer attempting the PSC by the end of the set of simple pseudo-words, and despite resuming the PSC at commencement of the simple real words, they were twice as likely not to be participating when the complex words started. This differential grew with 58.9% of Year 1 country students not completing the final word

[18] F(2,4405)= 27.0, p<.001

in the PSC. The proportion of metropolitan and country Reception students followed much the same trajectory, with only 20.2% of metropolitan and 23.6% of country Reception students participating at the end of the PSC. Greater Adelaide Reception students were approximately 10 percentage points more likely to participate across most of the 40 words, with 28.8% of these students finishing the Check.

Figure 21: PSC - Proportion of students not attempting words, by year level and region



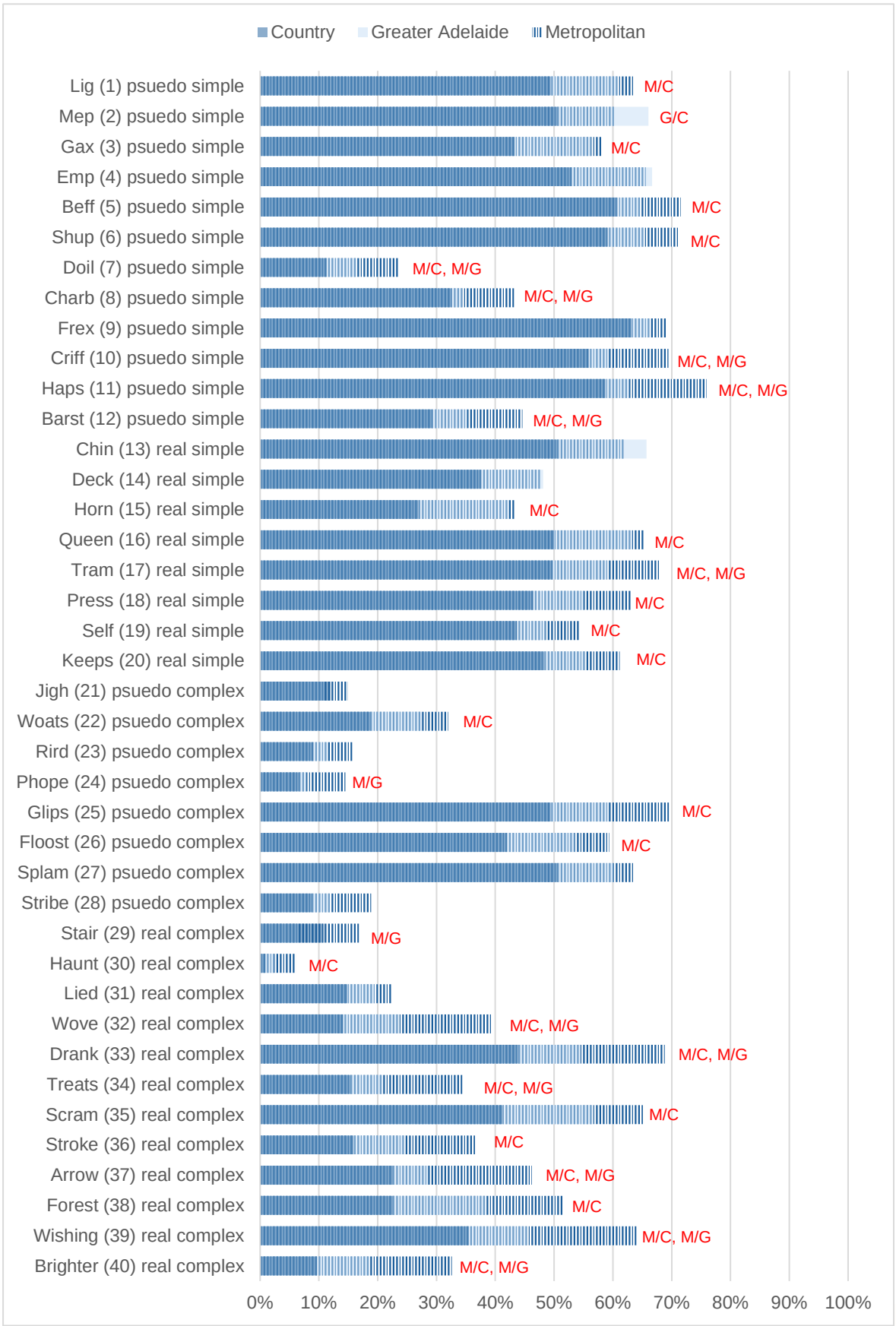
Metropolitan students were significantly more likely than country students to correctly pronounce a mix of real and pseudo, simple and complex words with differences more marked for Reception than Year 1 students (see Figure 22 and Figure 23). For simple pseudo-words, metropolitan Reception students were statistically more likely than country students (by around 10 to 15 percentage points) to pronounce all words with the exception of MEP [2], EMP [4] and FREX [9]. Greater Adelaide Reception and Year 1 students were more likely to pronounce MEP [2] correctly than country students (with neither different to metropolitan students). FREX [9] was pronounced correctly by almost two thirds of attempting country Reception students – the highest correct response for country students for any word. DOIL [7] was pronounced poorly across the board, but fared particularly poorly for country Reception students who with 11.3% correct pronunciations were half as successful as metropolitan Reception students (23.6%).

Simple pseudo-words posed less of a challenge for Year 1 country students, with only three differences found. In addition to MEP [2] as discussed above, DOIL [7] proved more difficult for Greater Adelaide compared with metropolitan Year 1 students. Whereas, CRIFF [10] was pronounced better by metropolitan Year 1 students compared with students from Greater Adelaide or country.

More metropolitan than country students pronounced simple real words correctly, the exceptions being CHIN [13] for both Reception and Year 1 students, DECK [14] for Reception students and KEEPS [20] for Year 1 students - where no statistical differences were found.

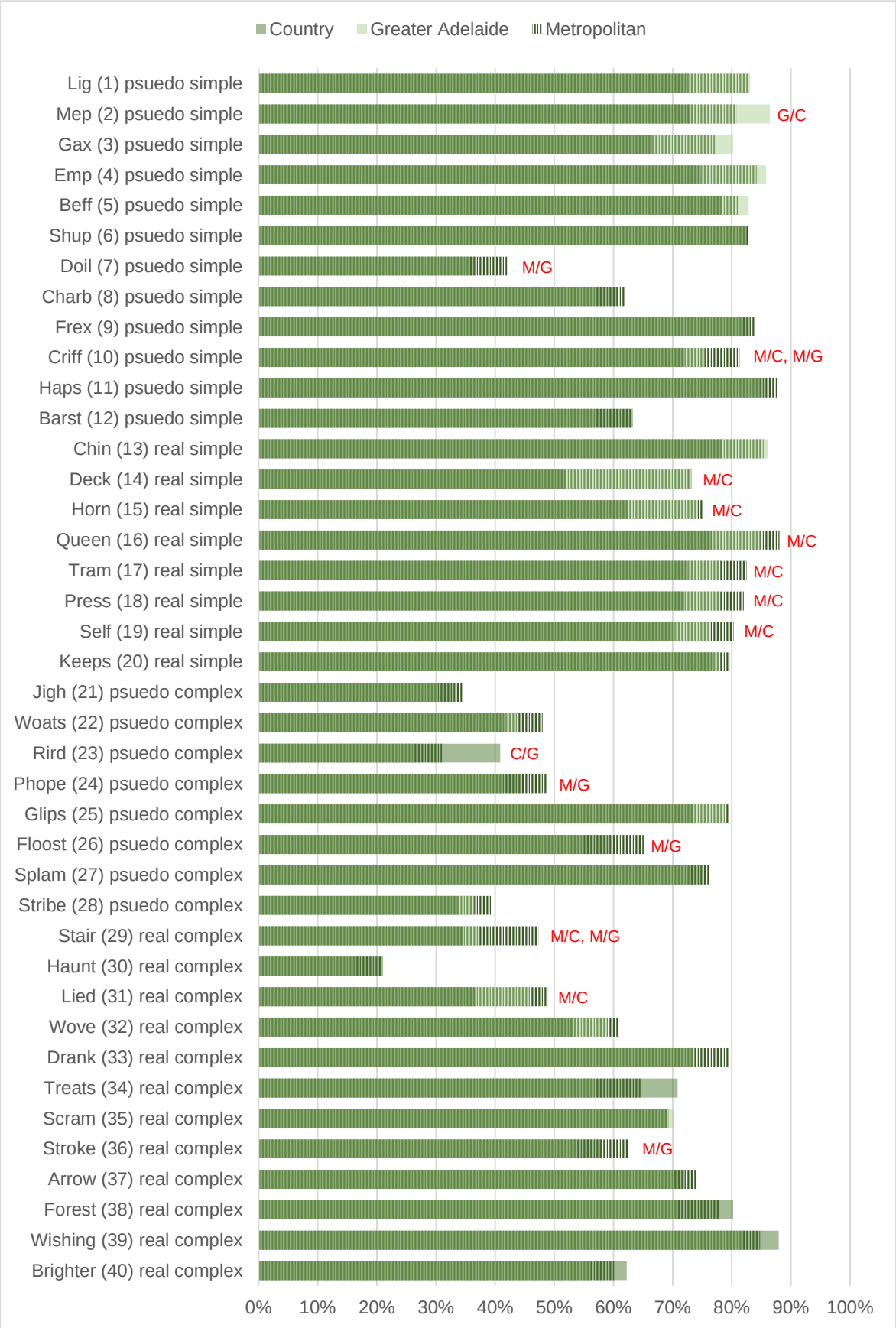
Complex pseudo and complex real words were poorly pronounced by country Reception students. Amongst these words, approximately half the proportion of country Reception students (compared with metropolitan Reception students) correctly pronounced RIRD [23], PHOPE [24], STRIBE [28], WOVE [32], TREATS [34], STROKE [36], ARROW [37], FOREST [38], WISHING [39] and BRIGHTER [40]. We note that this differential was not evident for country and metropolitan students in Year 1.

Figure 22: PSC - Proportion of Reception students attempting words achieving correct pronunciation, by location



** indicates statistical differences were found between (/) Metropolitan (M), Greater Adelaide (G) or Country (C)*

Figure 23: PSC - Proportion of Year 1 students attempting words achieving correct pronunciation, by location



** indicates statistical differences were found between (/) Metropolitan (M), Greater Adelaide (G) or Country (C)*

2.3.5 Aboriginal and Torres Strait islander students

Only 267 Aboriginal and Torres Strait Islander students undertook the PSC comprising 6.1% of participating students, with this cohort pronouncing statistically fewer words correctly in Reception ($\overline{X}$=4.8) and Year 1 ($\overline{X}$=14.3), compared with other students ($\overline{X}$=11.2 and $\overline{X}$=22.9, respectively; see Figure 24)[19]. We note that almost one half (46.8%) of Aboriginal and Torres Strait Islander Reception students and 16.7% of Year 1 students did not correctly pronounce any words - more than double the rate of 'other' Reception students and four times the rate of other Year 1 students who were unable to correctly pronounce any words (19.8% and 3.4%, respectively). Additionally, a quarter (25.5%) of Reception students and 13.5% of Year 1 students achieved between one and five correct words (see Figure 25). In total, 72.5% of Aboriginal and Torres Strait Islander Reception students and 30.2% of Year 1 students were only able to pronounce up to five words.

Figure 24: PSC - Mean number of correctly pronounced words, by year level and Aboriginality

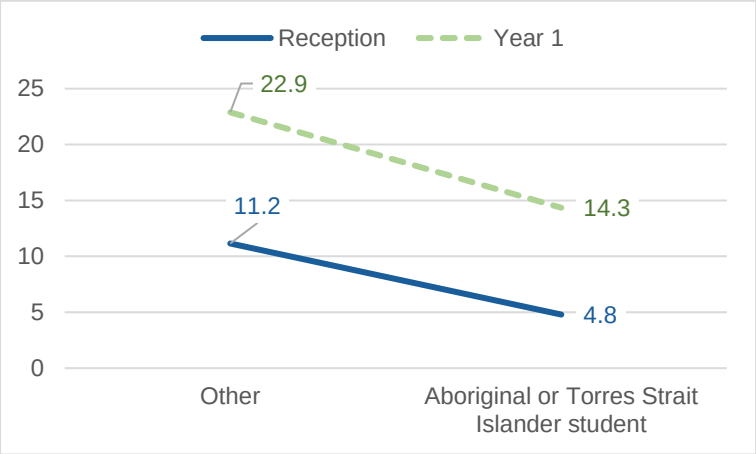
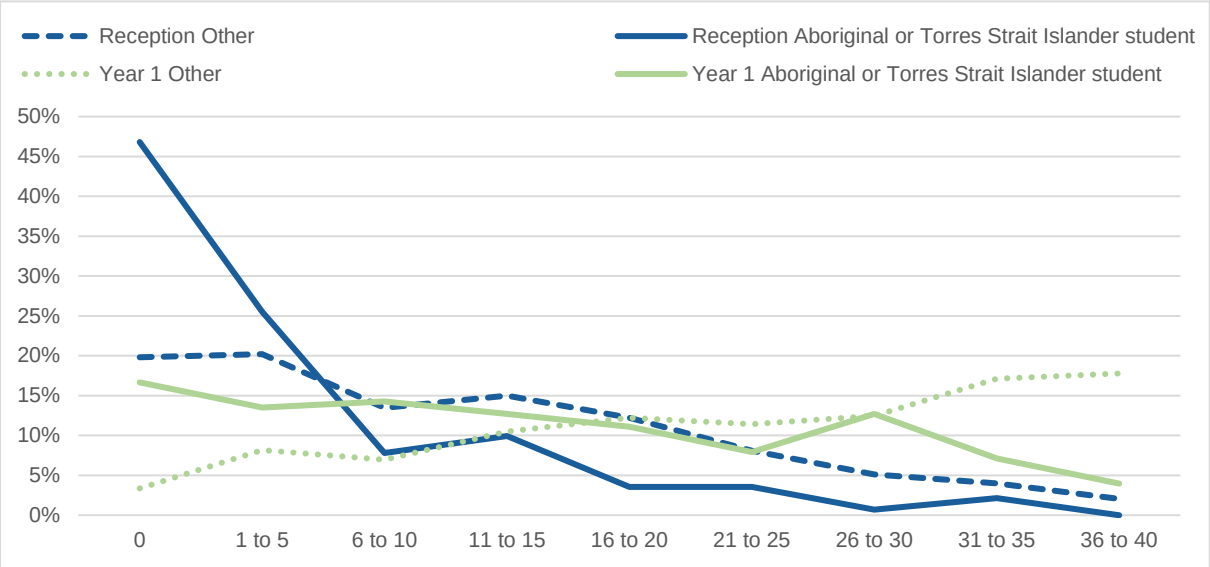


Figure 25: PSC - Number of correctly pronounced words, by year level and Aboriginality

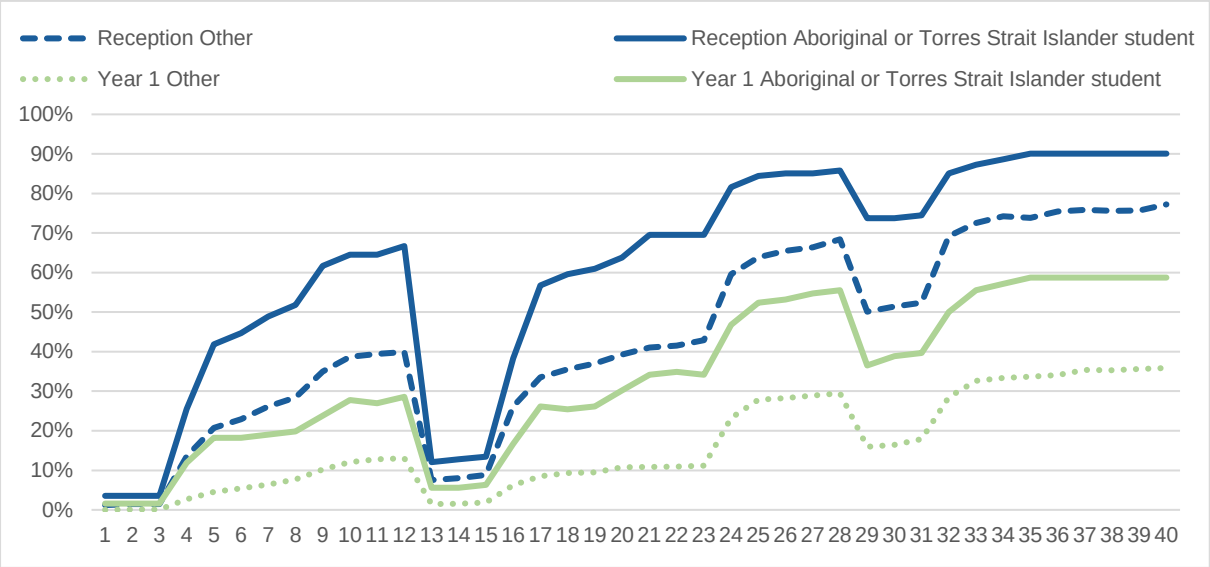


At the end of the simple pseudo-words only one third of Aboriginal Reception students were participating in the PSC (see Figure 26). In line with the stop instructions, rates rebounded for simple real words. However, we note that in spite of this rebound, teachers were less likely to

[19] F(1,4405)=234.1, p<.001

restart non-participating Aboriginal and Torres Strait Islander students at commencement of real words. By the final word of the PSC only 14 (9.9% of those commencing) Aboriginal and Torres Strait Islander Reception students and 52 (41.3%) Year 1 students were still participating, compared with 22.8% and 64.1% of other Reception and Year 1 students, respectively.

Figure 26: PSC - Proportion of students not attempting words, by year level and Aboriginality



Differences in the proportion of correct pronunciations between Aboriginal and Torres Strait Islander and other students tended to be in the range of around seventeen percentage points for Reception and fifteen percentage points for Year 1 students, with both statistically less likely to pronounce words correctly than the 'other' group. The largest differences between Aboriginal and Torres Strait Islander and other Reception students tended to be found at the beginning of the simple pseudo-words and again at the beginning of the simple real words with high rates of difference preceding the sharp decline in participation once the stop instructions had been applied, indicating a difficulty with pronouncing any, rather than specific, words (see Figure 27).

We note that while the rate of difference remained high throughout, low numbers of Aboriginal and Torres Strait Islander students participating in the PSC after the halfway mark made statistical significance harder to achieve. At this point only 43 (30.4%) Reception and 83 (65.9%) Year 1 students were engaged with the Check. Of particular note, no Aboriginal and Torres Strait Islander Reception students correctly pronounced STRIBE [28] or HAUNT [30], compared with 17% and 5% of others. RIRD [23] was also difficult for this cohort with only 2% correct (compared with 15% of other students), with LIED [31] (6%) and JIGH [21] (7%) also pronounced poorly by Aboriginal and Torres Strait Islander Reception students.

While differences between Aboriginal and Torres Strait Islander and other Year 1 students were often statistically significant, the quantum was usually lower (see Figure 28). However, there was a 29% differential between Aboriginal and Torres Strait Islander and other Year 1 students for simple real word HORN [15], a 25% difference for complex pseudo-word FLOOST [26] and 24% for complex real word STAIR [29]. We also note that fewer than a quarter of Aboriginal and Torres Strait Islander Year 1 students attempting HAUNT [30], STAIR [29], DOIL [7], STRIBE [28] and RIRD [23] pronounced them correctly.

Figure 27: PSC - Proportion of Reception students attempting words and achieving correct pronunciation, by Aboriginality

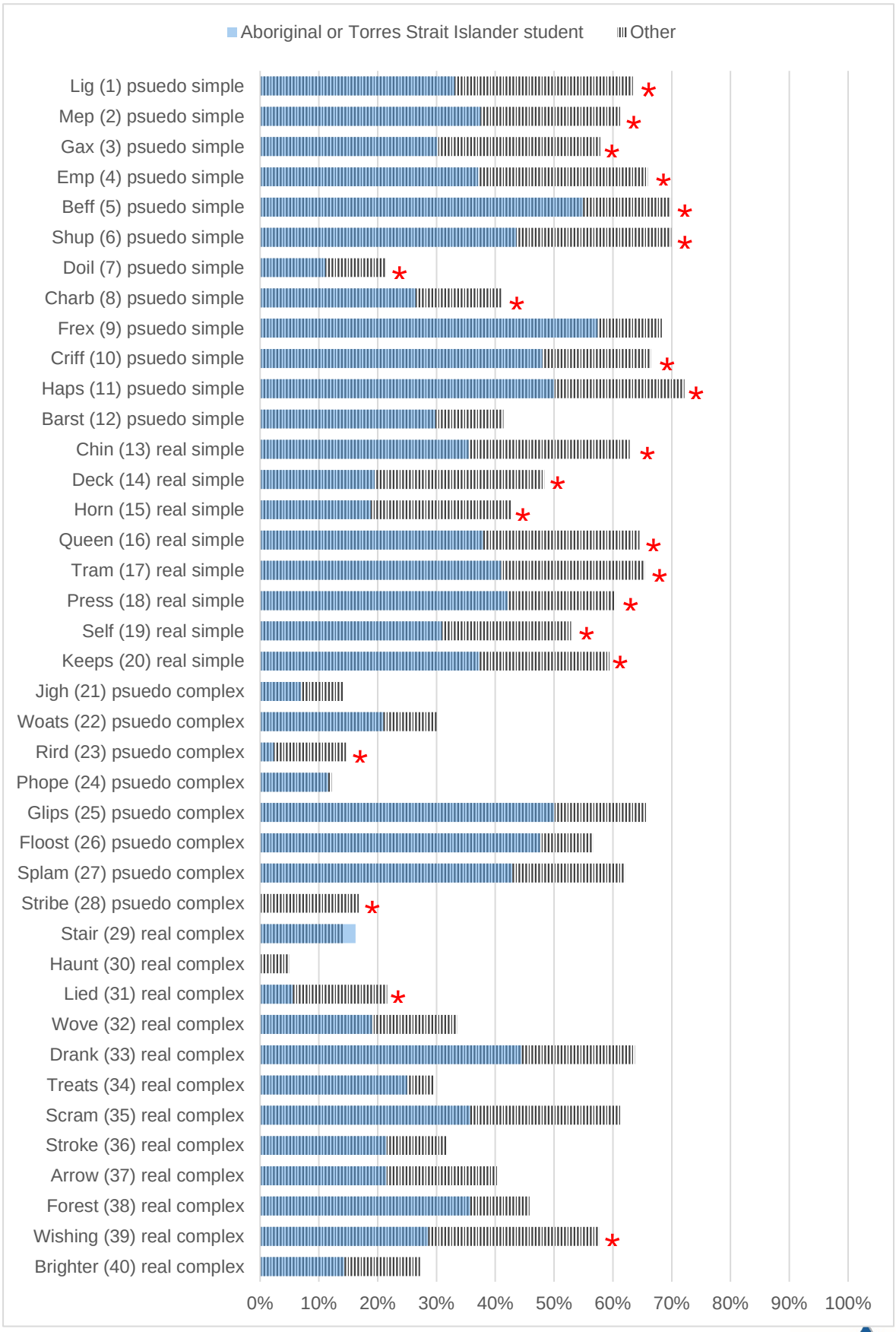
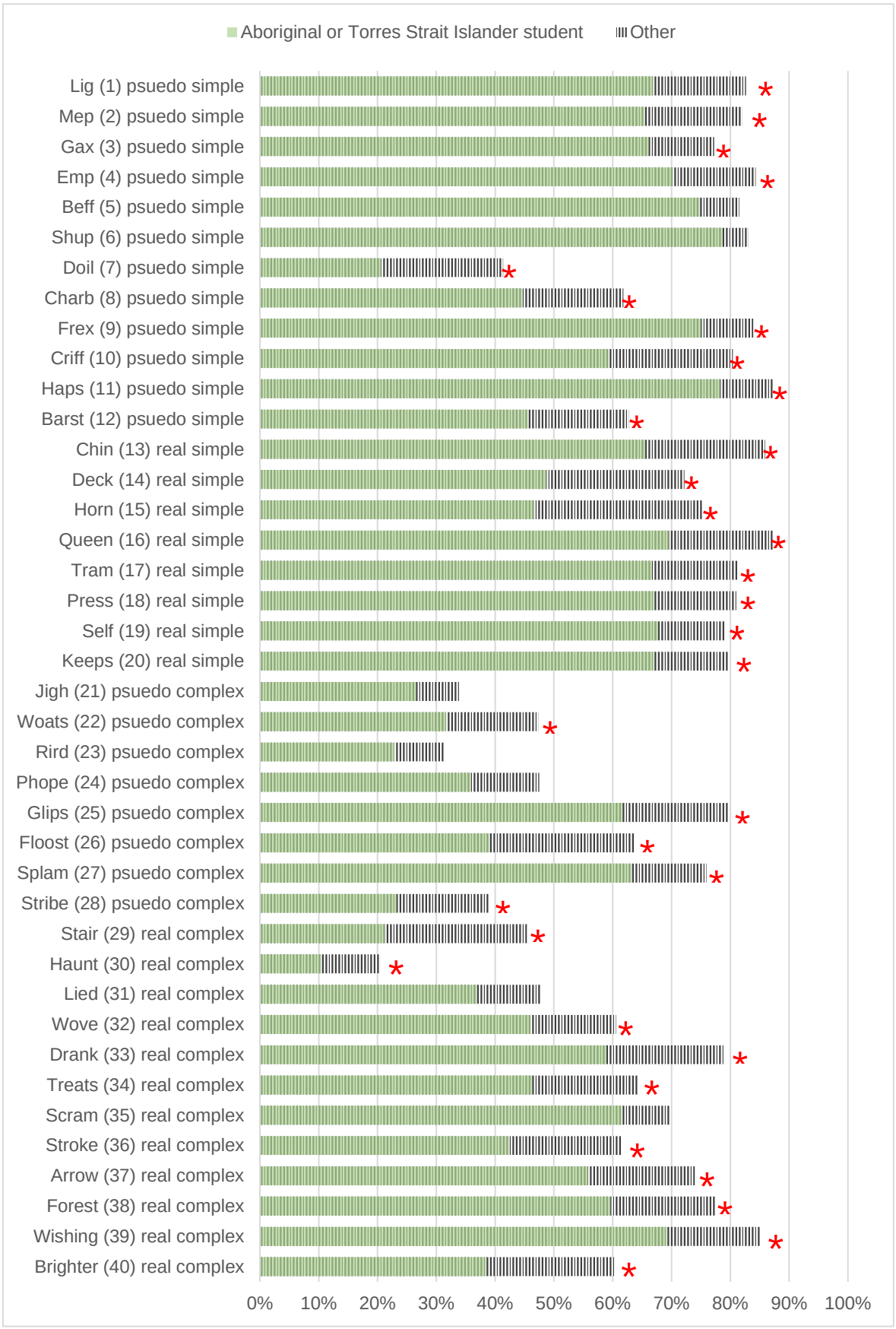


Figure 28: PSC - Proportion of Year 1 students attempting words and achieving correct pronunciation, by Aboriginality



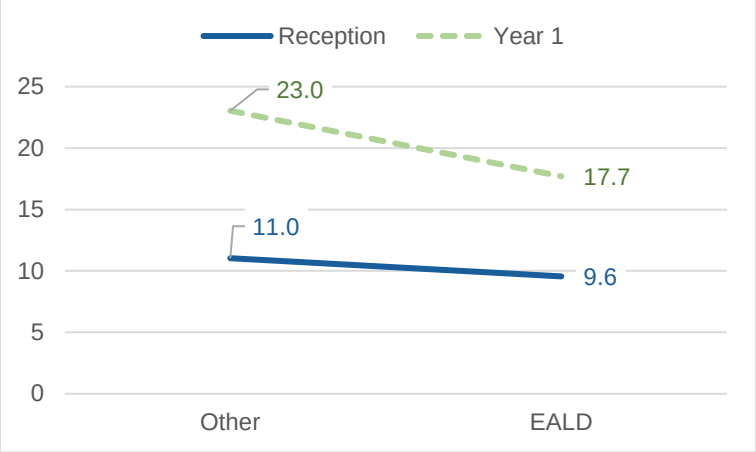
2.3.6 Qualified for EALD funding

Reception (18.4%) students were almost one and a half times as likely to qualify for EALD funding as Year 1 (12.4%) students, indicative of the growth in oral language skills from Reception to Year 1. This is likely to be the result of student language acquisition benefiting from participation in a learning environment and engagement with their English-speaking classmates and teachers. We note that there is a relationship between Aboriginal and Torres Strait Islander and EALD students as three in ten (30.0%) Aboriginal and Torres Strait Islander students receive EALD funding. However, only 11.7% of EALD students are identified as of Aboriginal and Torres Strait Islander background.

Results show EALD Reception students pronounced statistically fewer words correctly ($\overline{X}$=9.6) than other Reception students ($\overline{X}$=11.0), and EALD Year 1 students pronounced statistically fewer words correctly ($\overline{X}$=17.7) than other Year 1 students ($\overline{X}$=23.0; see Figure 29). Our analysis of PSC scores by EALD found a statistically significant interaction effect[20], in addition to year level and EALD effects. This indicates the proportional difference between the Means of Reception and Year 1 students was greater for 'other' students (109.1%) than for EALD students (84.4%), and that the difference between EALD and other student Means was greater for Year 1 (29.9%) than Reception (14.6%).

This is evident in Figure 30, where higher proportions of Reception students failed to pronounce between 0 and 15 words correctly. We also note that Year 1 EALD students were twice as likely to pronounce 0, 1 to 5 and 6 to 10 words correctly compares with others - and half as likely to pronounce 36 to 40 words correctly. Figure 31 shows that EALD students were less likely to attempt words than other students in their year level. This equates to around a five percentage point differential for Reception students and approximately twelve point differential for Year 1 students.

Figure 29: PSC - Mean number of correctly pronounced words, by year level and EALD



[20] F(1,4405)=16.8, p<.001. Noting this is the only interaction effect found (i.e. no interaction was evident for gender, region or for Aboriginal or Torres Strait Islander status).

Figure 30: PSC - Number of correctly pronounced words, by year level and EALD

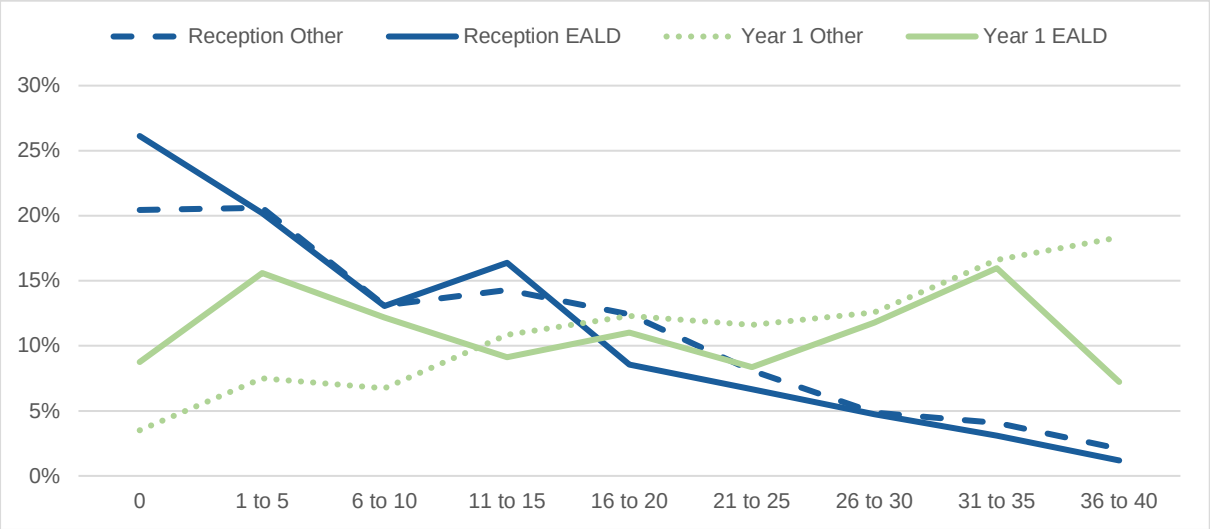
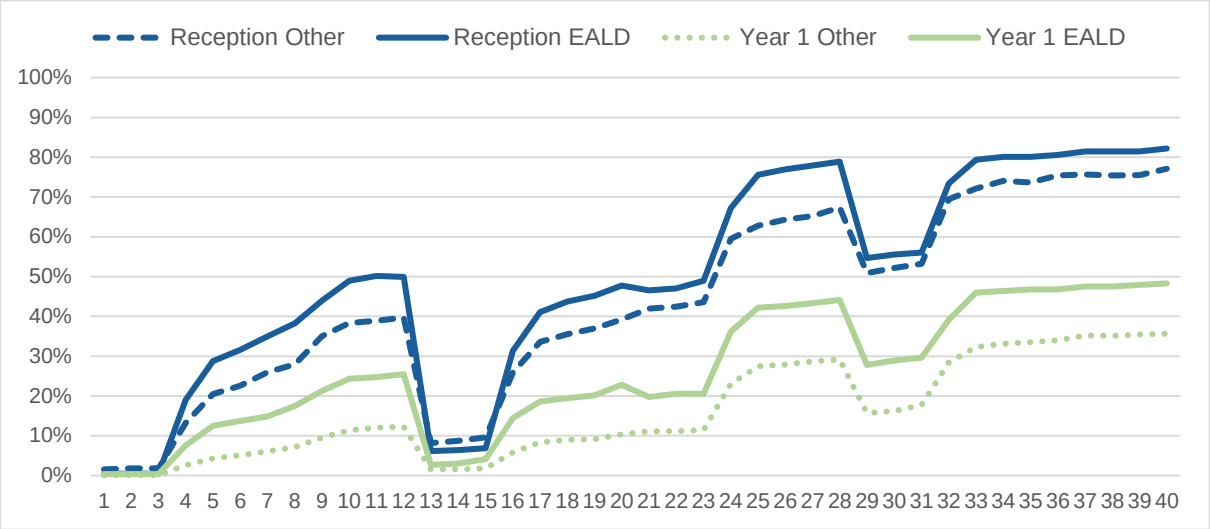


Figure 31: PSC - Proportion of students not attempting words, by year level and EALD



Few statistical differences were found between EALD and other Reception students in their responses after the initial three words (see Figure 32). We note that poor pronunciation by EALD students at this stage of the PSC is reflected in the decline in participation of this cohort (evident in Figure 33). It is interesting that the other three statistical differences showed mixed results. EALD Reception students were found to be more successful in pronouncing simple pseudo-word CHARB [8] and complex real word WISHING [39]; whereas other Reception students were more likely to pronounce simple real word CHIN [13].

EALD Year 1 students pronounced eight of twelve simple pseudo-words, six in eight simple real words, five of eight complex pseudo-words and four in twelve complex real words statistically less often than other students. The comparatively high number of statistical differences for this set of words suggests a real and ongoing difference in student phonic skills for those remaining eligible for EALD funding at the Year 1 level.

Figure 32: PSC - Proportion of Reception students attempting words and achieving correct pronunciation, by EALD

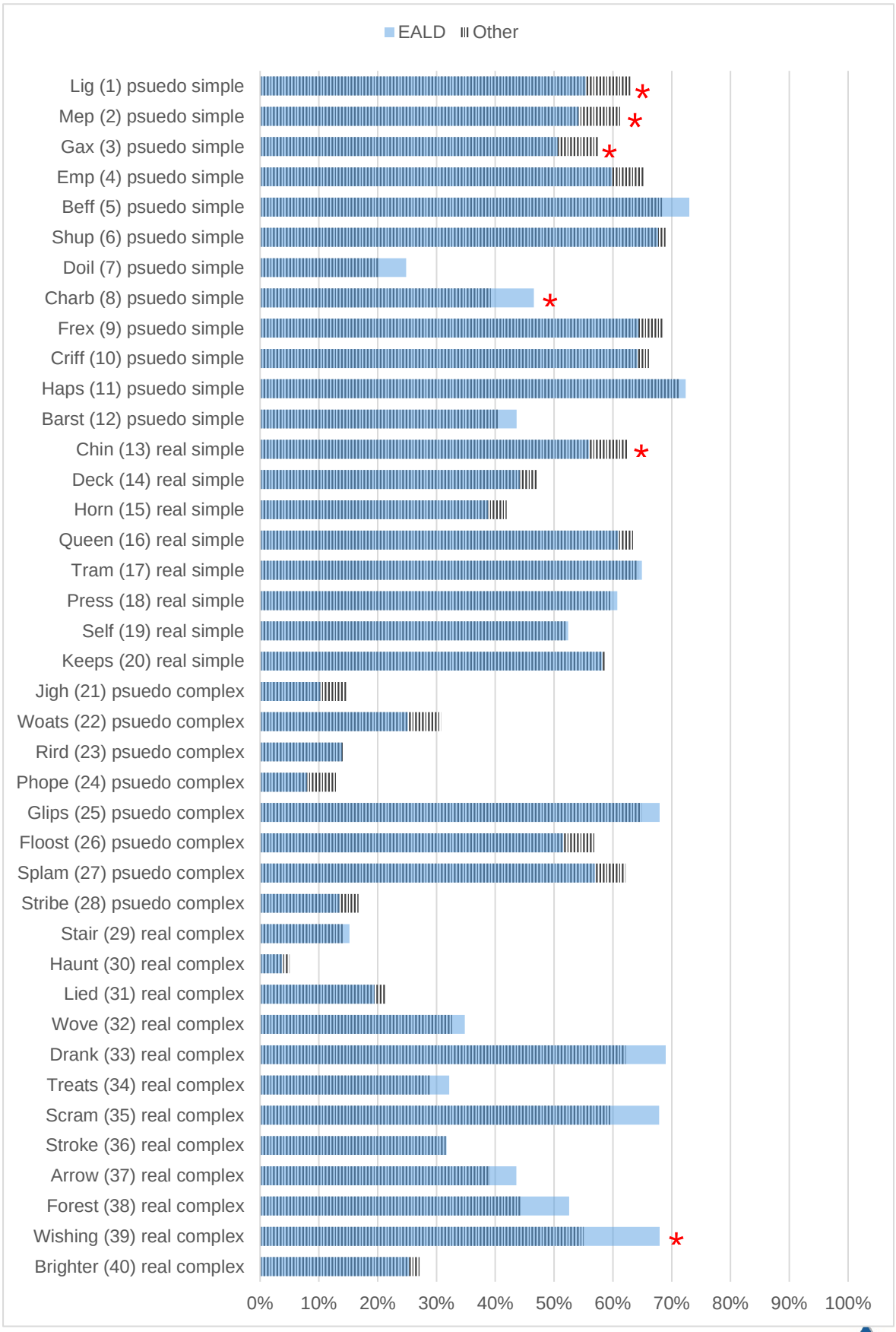
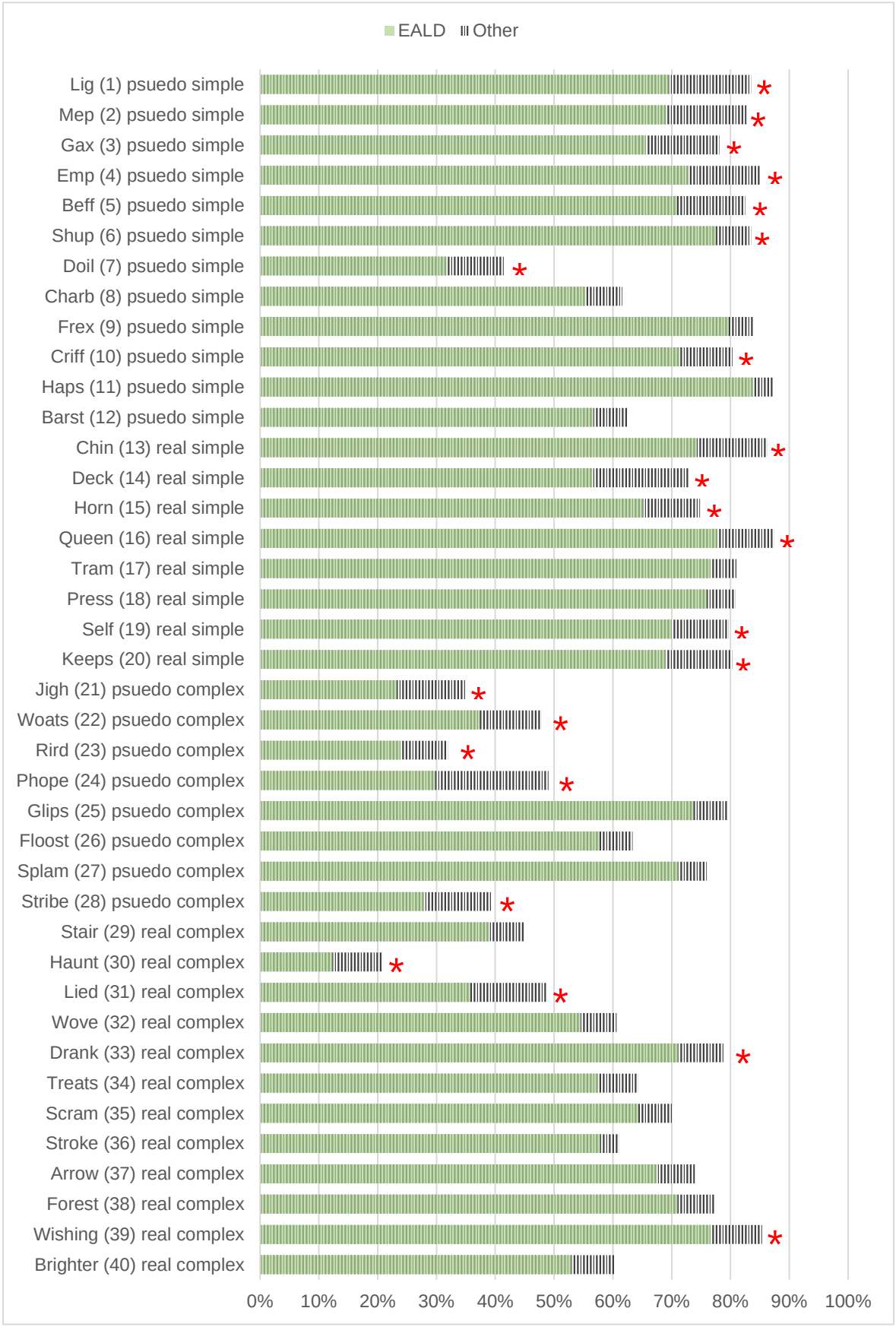


Figure 33: PSC - Proportion of Year 1 students attempting words and achieving correct pronunciation, by EALD



2.4 Analysis of letter combinations

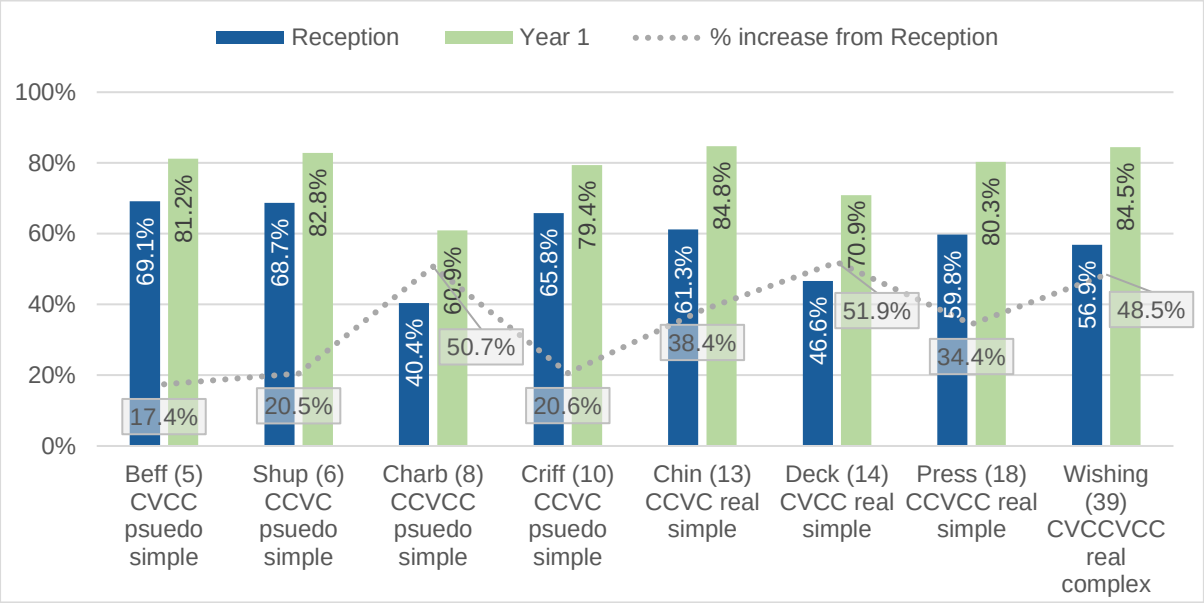
2.4.1 Consonant digraphs

A consonant digraph is a single sound represented by two consonants. Eight consonant digraphs[21] were included in the PSC:

- BEFF [5] – simple pseudo
- SHUP [6] – simple pseudo
- CHARB [8] – simple pseudo
- CRIFF [10] – simple pseudo
- CHIN [13] – simple real
- DECK [14] – simple real
- PRESS [18] – simple real
- WISHING [39] – complex real

BEFF [5] and SHUP [6] proved the easiest of the consonant digraph words, correctly pronounced by seven in ten Reception students and four in five Year 1 students who attempted them (see Figure 34). Of these words CHARB [8] proved the most challenging for both year levels with only 40.4% of Reception and 60.9% of Year 1 attempting students pronouncing it correctly. Despite this, CHARB [8] joined DECK [14] and WISHING [39] as words showing the most student improvement – with around fifty percent increase in the proportion of students pronouncing these words correctly from Reception to Year 1.

Figure 34: PSC – Proportion of students attempting words containing consonant digraph and achieving correct pronunciation, by year level



[21] The consonant digraph is presented in red in each word.

2.4.2 Frequent and consistent vowel digraphs

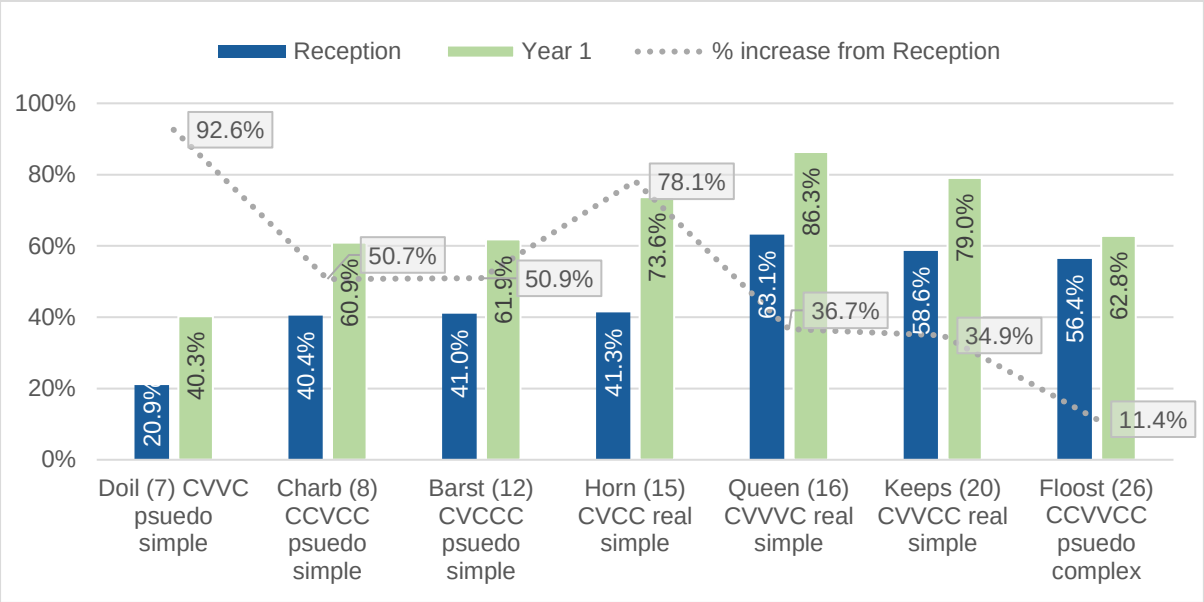
Vowel digraphs are two letters combined together that make a vowel sound. Vowel digraphs may include double vowels, two different vowels or a vowel and consonant that make a vowel sound when presented together. Seven frequent and consistent vowel digraphs[22] were included in the PSC:

- DOIL [7] – simple pseudo
- CHARB [8] – simple pseudo
- BARST [12] – simple pseudo
- HORN [15] – simple real
- QUEEN [16] – simple real
- KEEPS [20] – simple real
- FLOOST [26] – complex pseudo

DOIL [7] was one of the most difficult words in the PSC with only one in five Reception students attempting the word pronouncing it correctly – half the proportion correct of the two other simple pseudo-words in this set of frequent and consistent vowel digraphs (see Figure 35). Year 1 students were almost twice as likely to pronounce DOIL [7] correctly, noting that it starts from a low base in Reception and remains more than twenty percentage points lower than other Year 1 responses to frequent and consistent vowel digraph words.

QUEEN [16] is the least challenging of these words, correctly pronounced by 63.1% of Reception students and 86.3% of Year 1 students and with relatively modest growth (36.7%) across the year levels. However, as previously identified QUEEN [16] is a commonly known word due to its regular inclusion in alphabet charts. With a 6.4 percentage point difference between Reception and Year 1, FLOOST [26] was only pronounced slightly better by Year 1 (62.8%) compared with Reception (56.4%) students – the smallest difference of any word in the PSC. We note though that by the 26th word in the PSC only one third (33.3%) of Reception students were participating, fewer than half participating Year 1 students (72.5%).

Figure 35: PSC – Proportion of students attempting words containing frequent vowel digraphs and achieving correct pronunciation, by year level



[22] The frequent and consistent vowel digraph is presented in red in each word.

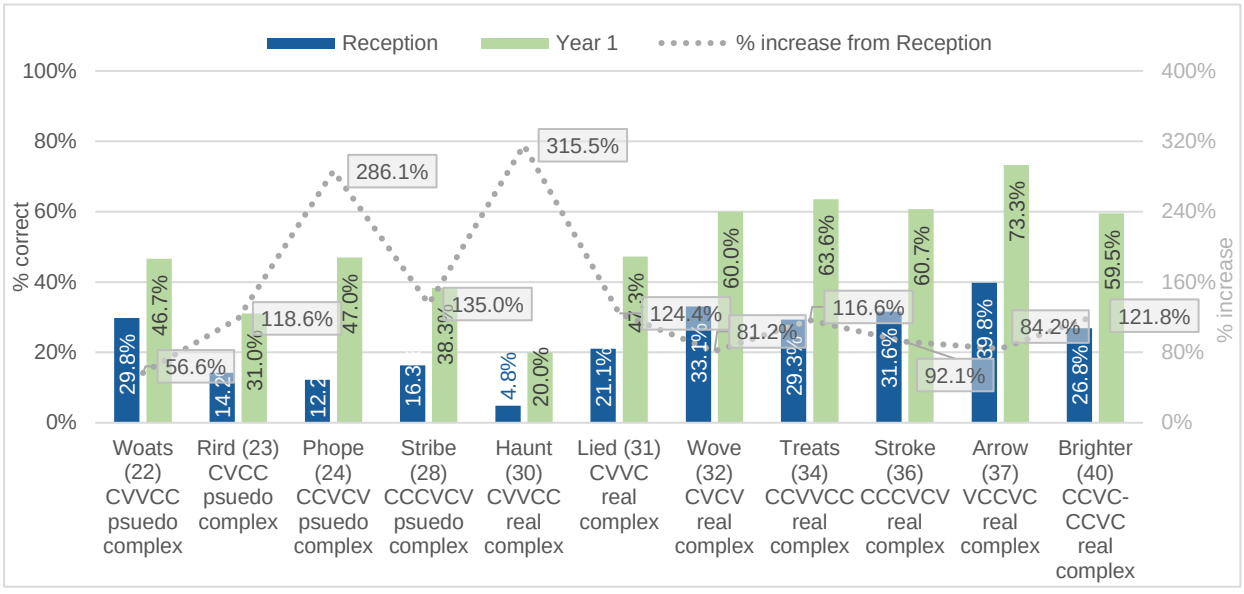
2.4.3 Less frequent and consistent vowel digraphs

Eleven less frequent and consistent vowel digraphs[23] were included in the PSC:

- WOATS [22] – complex pseudo
- RIRD [23] – complex pseudo
- PHOPE [24] – complex pseudo
- STRIBE [28] – complex pseudo
- HAUNT [30] – complex real
- LIED [31] – complex real
- WOVE [32] – complex real
- TREATS [34] – complex real
- STROKE [36] – complex real
- ARROW [37] – complex real
- BRIGHTER [40] – complex real

Students attempting the word HAUNT [30] struggled more with it than any other word (see Figure 36). Fewer than one in twenty Reception students and one in five Year 1 students pronounced it correctly. We note that by Year 1, students were three-fold more likely to pronounce it correctly than in Reception – although comparisons are from a very low base. RIRD [23], PHOPE [24][24] and STRIBE [28] also proved challenging, particularly for Reception students where fewer than one in six were able to pronounce them. The difference between Reception and Year 1, for these three words was smallest for RIRD [23] – with a 56.6% increase between the year levels. By the end of the PSC when the final complex real words were tested only the higher skilled students from each year level remained and were attempting words. Of the final less frequent and consistent vowel digraph words, ARROW [37] was pronounced correctly by more Reception (39.8%) and Year 1 (73.3%) students than other words, with an improvement of 84.2% from Reception to Year 1.

Figure 36: PSC – Proportion of students attempting words containing less frequent and consistent vowel digraphs and achieving correct pronunciation, by year level



[23] The less frequent and consistent vowel digraph is presented in red in each word.
[24] PHOPE [24] contained both a less frequent and consistent vowel digraph and an additional consonant digraph (ph).

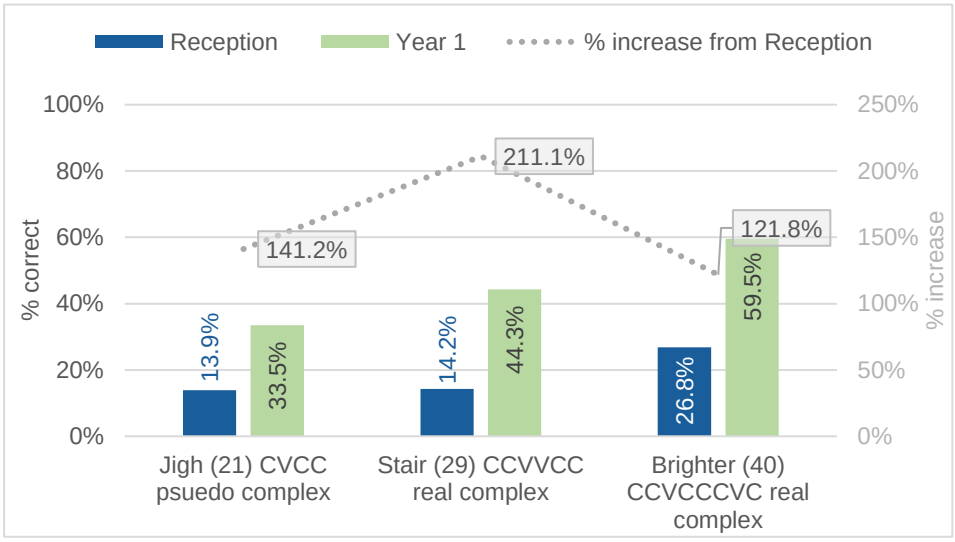
2.4.4 Trigraphs

A trigraph is a sequence of three letters that make a single sound. IGH and AIR are the two trigraphs[25] included in the PSC which are contained in three words:

- JIGH [21] – complex pseudo
- STAIR [29] – complex real
- BRIGHTER [40] – complex real

The three trigraphs were included in second (complex) half of the PSC. JIGH [21] and STAIR [29] proved equally challenging for Reception students (see Figure 37). However, familiarity with the word STAIR [29] may have accounted for the greater improvement (211.1%) in pronunciation for this word by Year 1. BRIGHTER [40] was pronounced correctly by twice as many Reception students as the other trigraphs – although fewer than one in four Reception students attempted the final word of the PSC, compared with one in two of these students attempting STAIR [29] and JIGH [21].

Figure 37: PSC – Proportion of students attempting words containing trigraphs and achieving correct pronunciation, by year level



[25] The trigraph is presented in red in each word.

3 Analysis of the teacher and leader survey and interviews - experience of the administration, value and use of the PSC

3.1 Administration of the PSC

3.1.1 Preparation for implementing the PSC

Teachers and leaders were strongly positive about the preparation and support available to them for conducting the PSC (see Figure 38). All leaders agreed the support materials were easy to understand and follow ($\overline{X}$=5.0) and that the support materials contained all information needed to do the PSC ($\overline{X}$=5.0). Teachers also strongly endorsed the statements ($\overline{X}$=4.9 and $\overline{X}$=5.0, respectively; also see Figure 40 and Figure 41). Four in five leaders (79.3%) and three in four teachers (73.8%) agreed that the induction session provided them with valuable information (see Figure 39), with one in ten disagreeing or unsure. Almost one in four teachers were unsure if advice was available if or when needed or neither agreed nor disagreed – we suggest this in itself is not a problem as they would have disagreed with the statement if they required advice, but could not get it. Only one teacher and one leader disagreed with the statement (see Figure 42).

Figure 38: Survey - Preparation for implementing the PSC, by role ($\overline{X}$)

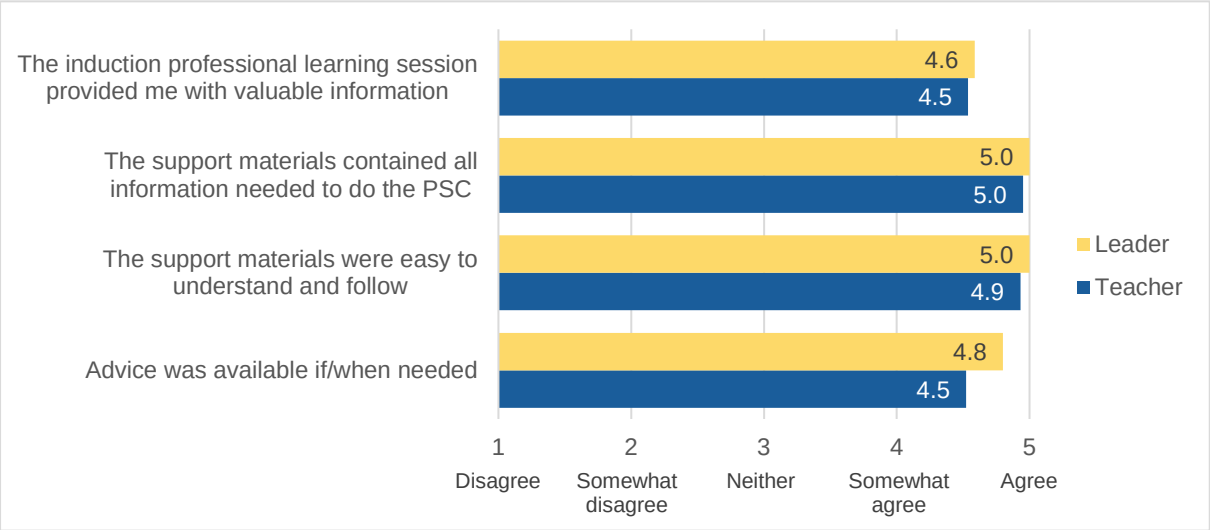
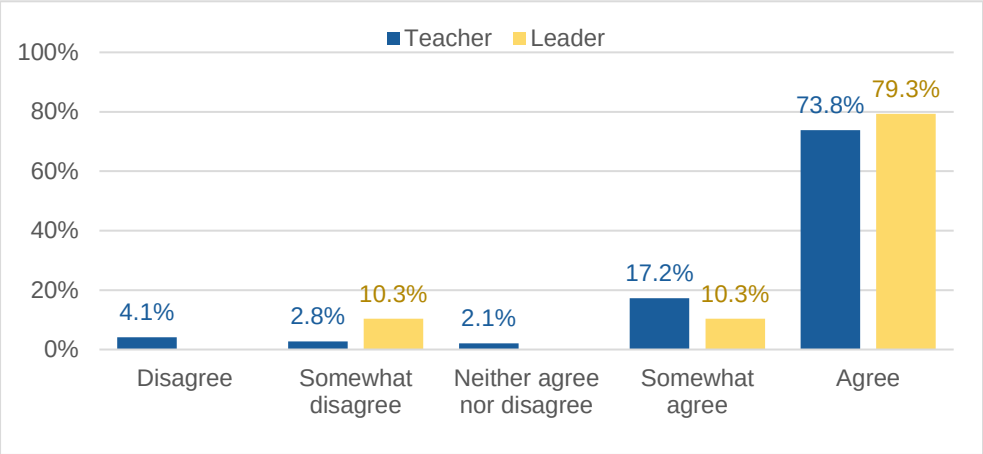
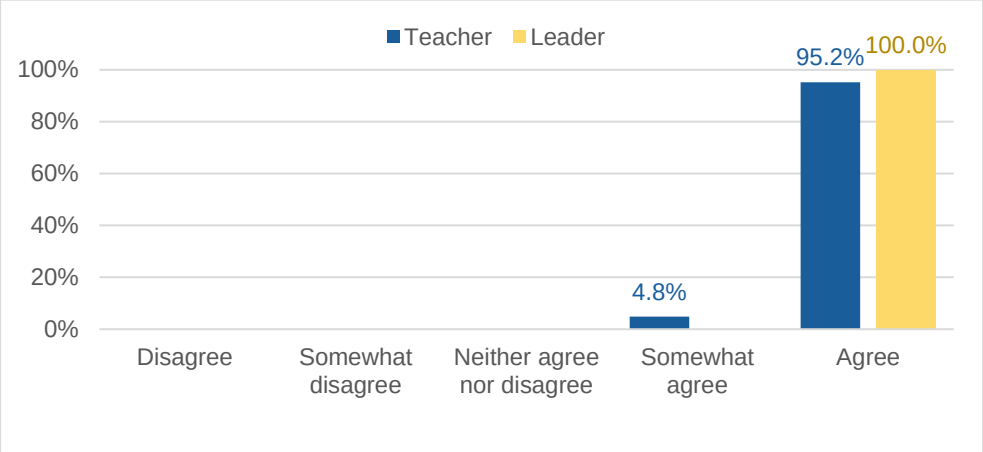


Figure 39: Survey - The induction professional learning session provided me with valuable information, by role (%)



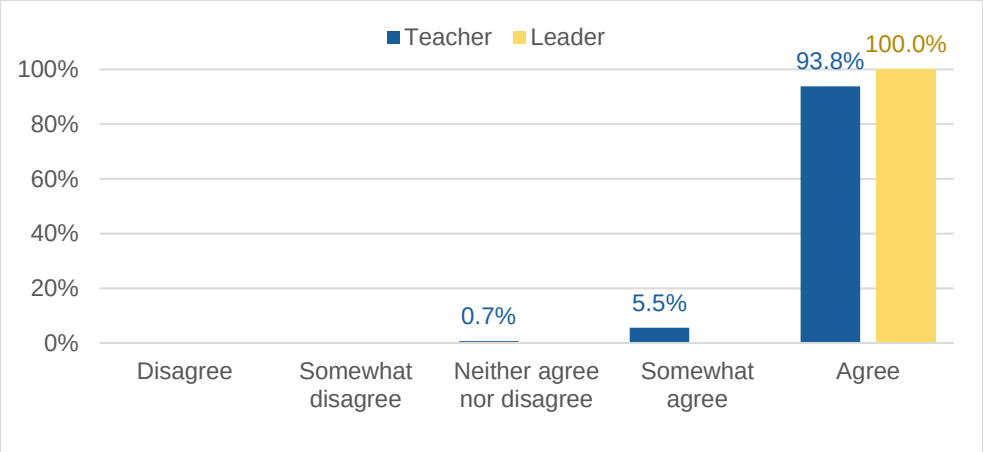
Note, unsure or not applicable data not presented

Figure 40: Survey - The support materials contained all information needed to do the PSC, by role (%)



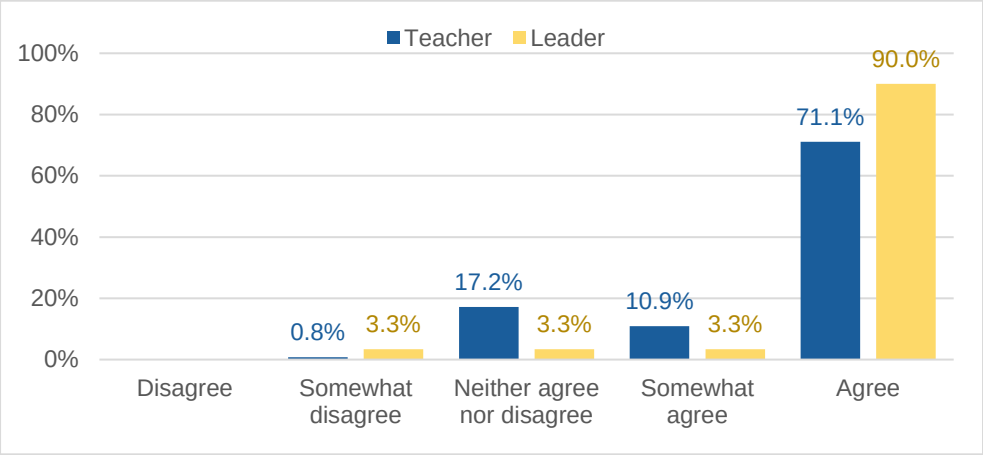
Note, unsure or not applicable data not presented

Figure 41: Survey - The support materials were easy to understand and follow, by role (%)



Note, unsure or not applicable data not presented

Figure 42: Survey - Advice was available if/when needed, by role (%)



Note, unsure or not applicable data not presented

The leaders and teachers consulted confirmed the survey findings in terms of a strong endorsement of the value of the training session. One minority view was that the induction session spent too much time on providing the background and rationale for using Phonics given that the instructors were '*preaching to the converted*' and that this element of the training did not give sufficient credit to teachers who have taught and tested students for many years. A few respondents considered that the allotted time could have been more usefully spent on providing greater technical implementation guidance and fielding questions from the audience.

However, the majority of leaders and teachers considered that there was a suitable balance between background information and technical implementation guidance with one noting that the context setting '*reinforced that we are on the right track'*. Another observation was that the background material '*made a strong case for why phonics teaching is a crucial building block*' which was useful for '*convincing some sceptics in the room'*. One leader commented that the induction presenter '*did a good job of unpacking the concepts, being non-confrontational, and presenting the evidence and information*'.

The following aspects of the induction session were singled out as of particular value:

- The session provided an opportunity for school teams to talk amongst themselves about '*where we are at*' in terms of Phonics teaching and assessment. The training discussions helped some leaders to identify which teachers were well versed in Phonics and who needed additional support and development.
- Some school teams used the training as a springboard for discussing how they currently implement phonics, for reflective practice purposes, to think about how phonics teaching intersects with site literacy agreements and to prompt broader thinking about how to do evidence-based literacy teaching at school.
- The session provided an invaluable opportunity for school teams to share experiences and ideas with other schools - '*we don't get the opportunity to do that often'*. For example, following a vibrant discussion around the training table, staff from one school took away two new Phonics programs (Michael Heggarty's Phonemic Awareness Curriculum and Sound Waves), investigated whether these would fit well at their site and subsequently introduced them into the school's early learning program.
- A number of teachers highlighted that the group training was valuable for achieving consistency in approach across schools, which is important for data quality and validation.

- One leader observed that the teachers in attendance appeared to feel valued and empowered by the training, seeing it as an investment in their development as teachers.

The leaders and teachers consulted also made a number of suggestions for potential improvement. Some teachers indicated that the training provided sufficient background and implementation information, but no guidance about how to interpret and what to do with the results. This meant the PSC was being positioned as an assessment tool and not a tool for designing learning.

Teachers from one school noted that with the final set of training concluding just one week before implementation, there was insufficient time to inform the wider school community (particularly parents and carers) about the PSC. The school had only wanted to do this once staff were fully informed about the process. The teachers wondered about the possibility of scheduling the training a little earlier to overcome this problem.

From a distance perspective, some teachers welcomed the opportunity to travel to Adelaide to train with staff from other schools and be exposed to new ideas and new thinking. Others highlighted the burden of travel and accommodation costs and proposed that a 'youtube training video' might be sufficient for teachers who are already experienced in phonics teaching (i.e. who are only looking for implementation guidance). One leader questioned whether a distance-ed mode could be developed to train new staff in the use of the PSC, noting that the training and delivery must be consistent if systematic and comparable data are to be collected.

3.1.2 Support materials

Almost all teachers and leaders endorsed the ease of use of support material provided to them to undertake the PSC with Mean ratings of between 4.7 and 4.9. Only six teachers somewhat disagreed that the scoring guide was easy to use (see Figure 47) with three of these also reporting some difficulties with the training video (see Figure 48). Two teachers disagreed that the answer sheet was easy to use (see Figure 45). The pupil's material and practice sheet were almost universally found easy to use – although a handful of teachers and leaders were ambiguous about the ease of use (see Figure 44 and Figure 46, respectively).

Figure 43: Survey - Support materials provided in the PSC Trial pack were easy to use, by role ($\overline{X}$)

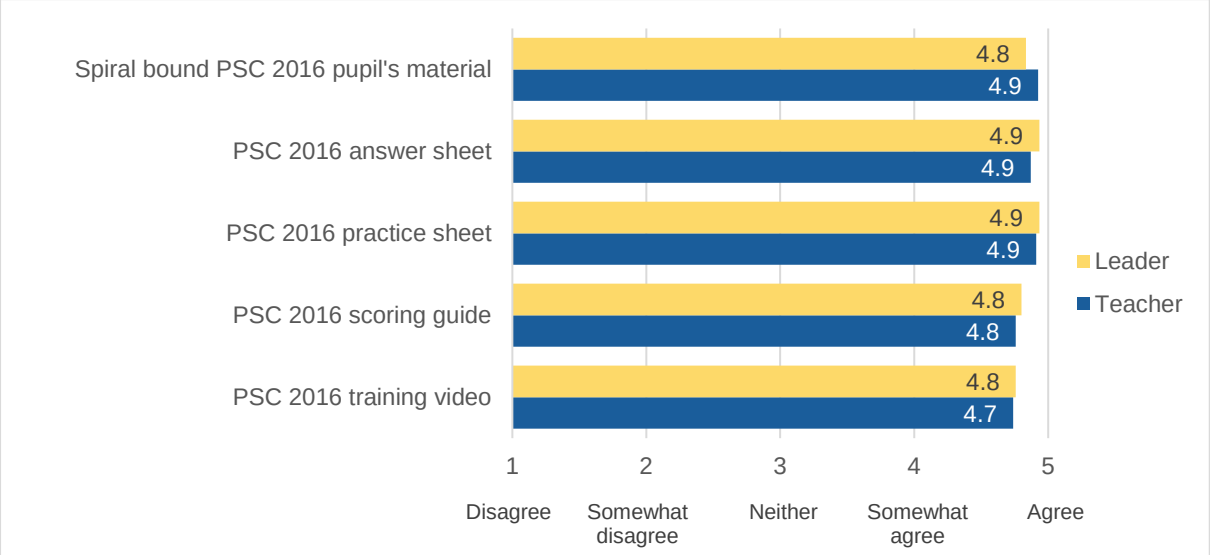


Figure 44: Survey - Spiral bound PSC 2016 pupil's material is easy to use, by role (%)

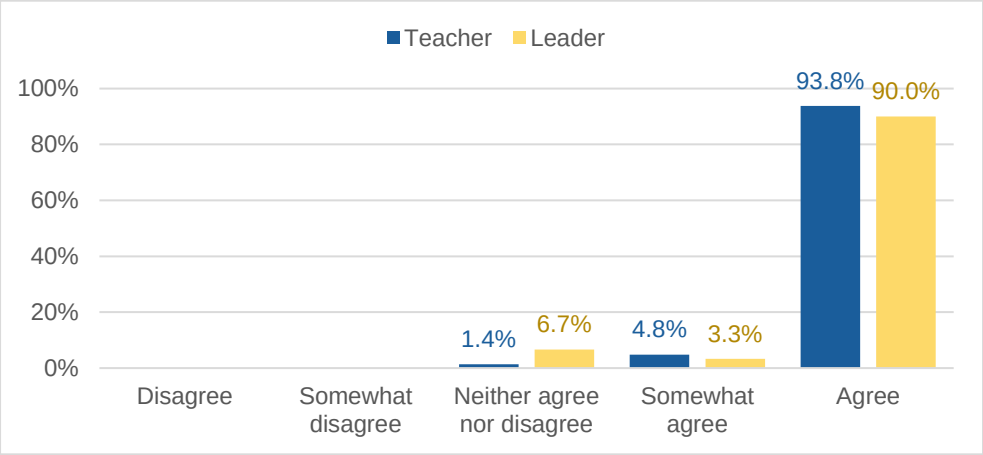


Figure 45: Survey - PSC 2016 answer sheet is easy to use, by role (%)

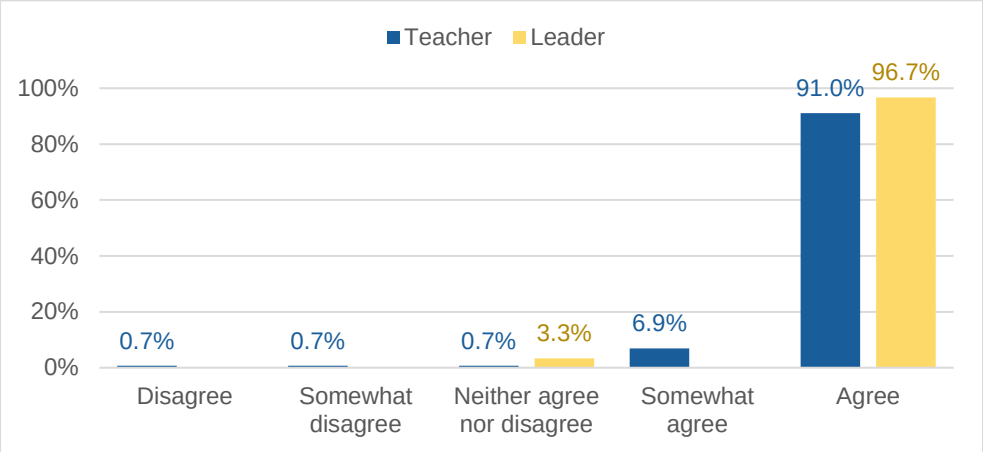


Figure 46: Survey - PSC 2016 practice sheet is easy to use, by role (%)

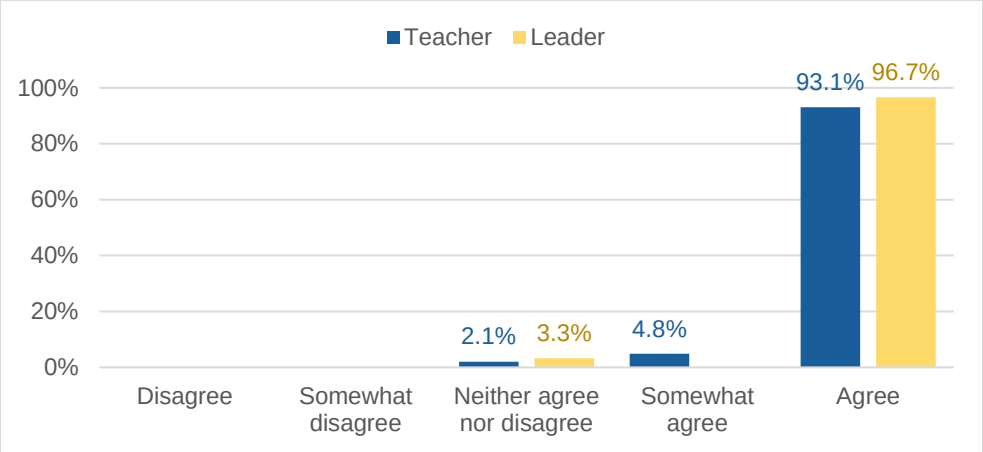
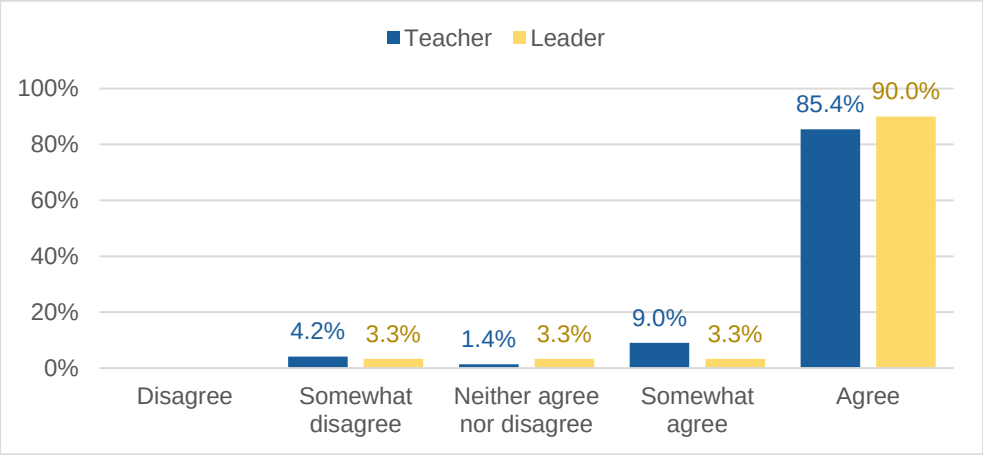
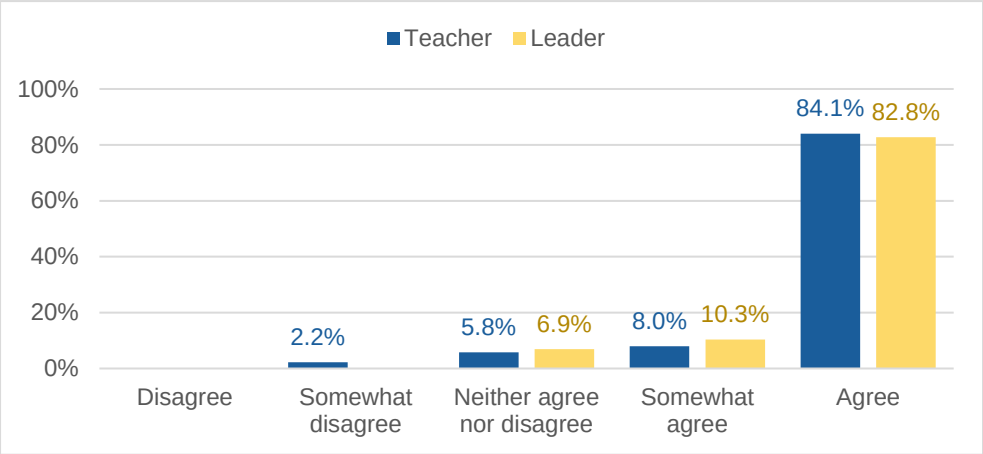


Figure 47: Survey - PSC 2016 scoring guide is easy to use, by role (%)



Note, unsure or not applicable data not presented

Figure 48: Survey - PSC 2016 training video is easy to use, by role (%)



Note, unsure or not applicable data not presented

There was consensus among all leaders and teachers consulted that the support materials were simple, clear and sufficient. One of the strongest features of the PSC was its ease of use, including being quick and straightforward to administer, which also helped to win over some staff members who were initially resistant to undertaking the PSC. The training video was considered particularly useful by a number of respondents in clarifying what pronunciation was acceptable and what not, although some would have preferred for the video to be presented in an Australian accent (currently UK-based).

The single greatest concern about the PSC booklet (which also was not necessarily flagged in the survey results) was in reference to the font which was deemed highly unfamiliar to South Australian students. Many teachers complained that their students could not distinguish some letters, for example l, k and j, and this was seen as having an adverse impact on some students' scores.

One additional suggestion was that flash cards might be a useful support material rather than the booklet, to present one word at a time rather than four on a page which some believe could be overwhelming for some children.

3.1.3 Implementing the PSC

Confidence in (teacher's) ability to implement the PSC

Teachers and leaders had confidence in their own or their teacher's ability to implement various aspects of the PSC (see Figure 49). All leaders were confident in their teacher's ability to provide encouragement and support without indicating the correctness of the answer (see Figure 54), and in their ability to introduce the PSC to children (see Figure 51). The lowest ranked of these items referred to confidence in the teacher's ability to interpret results and design appropriate interventions (see Figure 50). In this case, scores remained high overall - almost two thirds agreed with the statement with an additional quarter somewhat agreeing, however, three leaders and eight teachers disagreed – to some extent. There was broad agreement in the teacher's ability to maintain a consistent approach across all students (see Figure 52); step the student through the task in a timely and considerate manner (see Figure 53); and score the PSC correctly (see Figure 55).

Figure 49: Survey – Confidence in (teacher's) ability to implement the PSC, by role ($\overline{X}$)

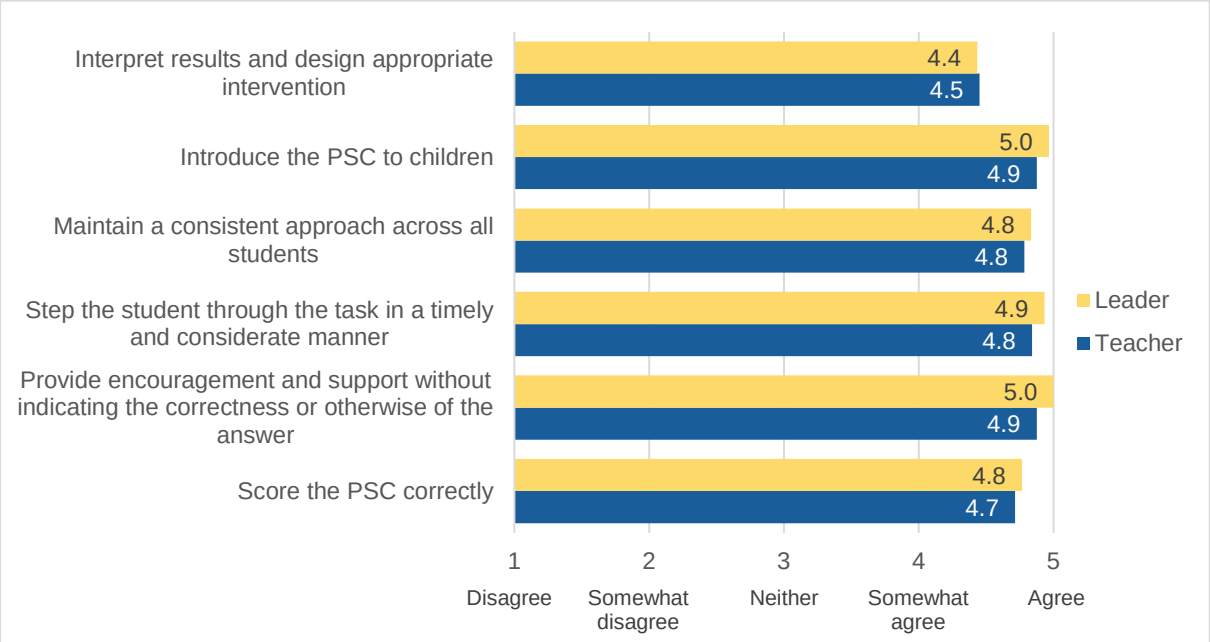


Figure 50: Survey – Confidence in (teacher's) ability to interpret results and design appropriate intervention, by role (%)

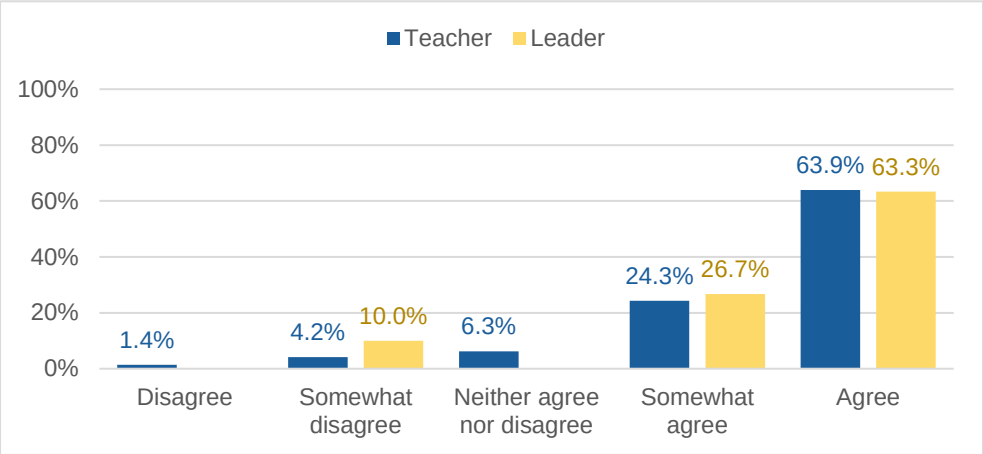


Figure 51: Survey - Confidence in (teacher's) ability to introduce the PSC to children, by role (%)

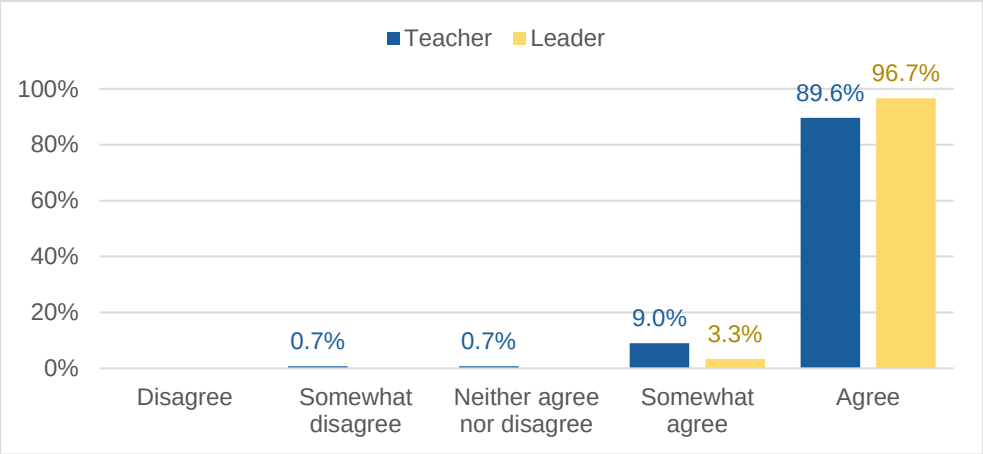
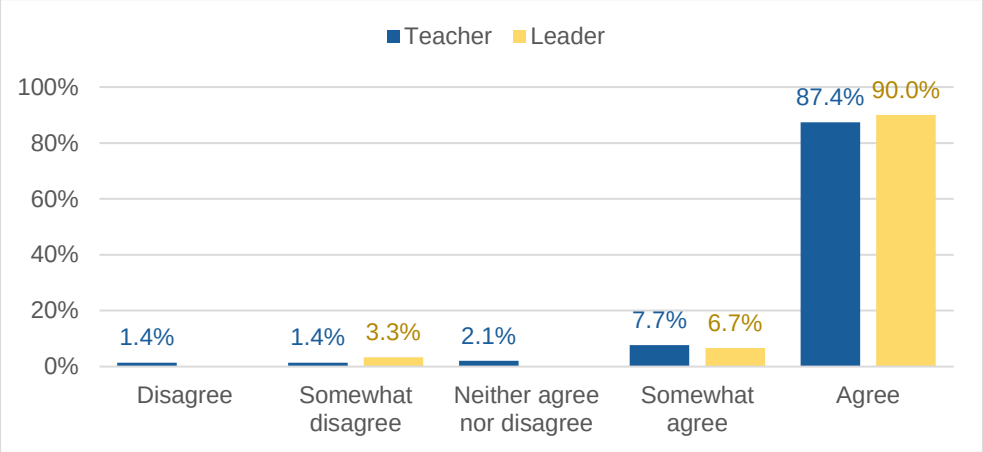


Figure 52: Survey - Confidence in (teacher's) ability to maintain a consistent approach across all students, by role (%)



Note, unsure or not applicable data not presented

Figure 53: Survey - Confidence in (teacher's) ability to step students through the task in a timely and considerate manner, by role (%)

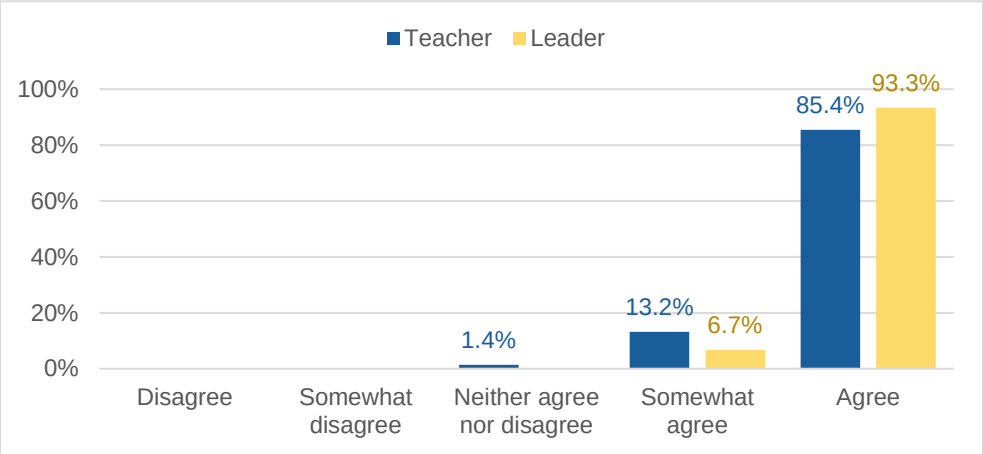


Figure 54: Survey - Confidence in (teacher's) ability to provide encouragement and support without indicating the correctness or otherwise of the answer, by role (%)

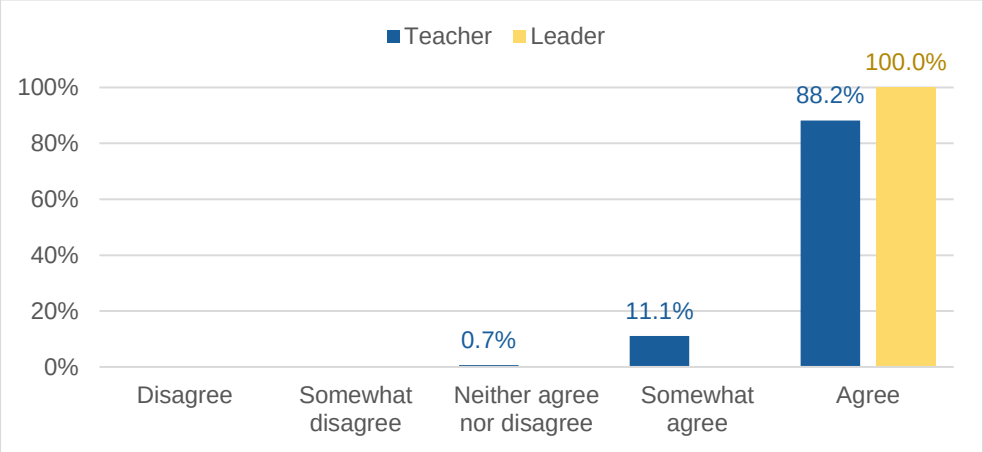
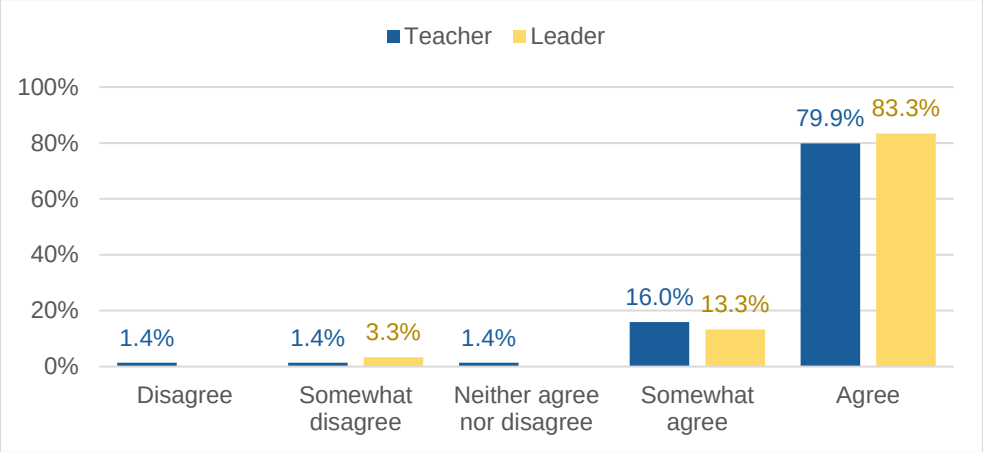


Figure 55: Survey - Confidence in (teacher's) ability to score the PSC correctly, by role (%)



In support of the survey findings, there was widespread consensus among the leaders and teachers consulted that on the basis of the training received, the support materials provided and the ease of the PSC tool, they were highly confident in their ability to implement the PSC. In the context of the survey identifying some minor disagreement around teachers' ability to maintain a consistent approach across all students and score the PSC correctly, the interviews were able to

cast some light on these matters. Teachers talked at length about trying to maintain consistency in approach across their own students, and consistency in approach across the site as a whole (in agreement with site leadership and other teachers). Many teachers reported administering the PSC in exactly the same way for all students irrespective of EALD or Indigenous background (even though EALD students did generally tend to struggle with blending more than others). Teachers were more likely to make accommodations (exceptions/adaptations) for students with language and/or speech impairments and to stop the check early for students with intellectual disabilities, behavioural issues and/or learning difficulties.

However, it transpired that while some teachers strictly applied the procedures as set out in the guidelines others varied the procedures based on their understanding of particular students' propensities and abilities (e.g. continued scoring beyond the technical stop point because they thought students would be able to achieve words in later lists). There were also incidences where teachers split a specific PSC session into two separate sessions or days to accommodate children who were tiring or losing focus (commonly children with behavioural issues or special learning needs).

Application of the stop instructions

Instructions for administering the PSC included details about when to stop the test:

> *If a student is struggling with letter recognition and makes three consecutive guesses unrelated to the graphemes presented, stop the check. If this occurs in the pseudo-word section, flip across to the real word section and continue the check until three consecutive errors occur. However, while a student is endeavouring to vocalise the phonemes, the teacher can collect useful data. (DECD Phonics Screening Check Administration Guide, p.4)*

While the survey results indicated fairly strong agreement that the scoring guide was easy to use, a number of the leaders and teachers consulted indicated that there was a degree of confusion regarding the stop instructions and whether/how to score students who technically should have been stopped but were continued out of interest to see how they would fare across the whole Check. Some teachers commented that in spite of efforts to homogenise the approach to PSC administration in the school, different teachers interpreted and applied the stop instructions differently. It was also noted that not all of the teachers who administered the PSC had attended the training personally; in some cases, one or more attending staff members subsequently conveyed the training to others back at the school sites. This may have compromised teachers' sense of consistency in how the PSC was understood and delivered on a wider scale.

Only 52.8% of responses (see Figure 58) administered the PSC by ceasing it after three incorrect responses and if in the pseudo-word section, skipping students ahead to the next real word section upon which the students would be ceased again after the next series of three incorrect words. However, we note the administration guide also suggested useful data could continue to be collected if the student was attempting the words – with this no doubt accounting for the high proportion of responses continuing the PSC after three consecutive errors. Teachers of Reception students (53.4%) were statistically[26] more likely than Year 1 teachers (40.5%) to continue the test after three consecutive errors (see Figure 59).

[26] X^2 (1, N=4406)=74.0, p<.001.

Figure 56: PSC - Proportion of responses stopping after three errors

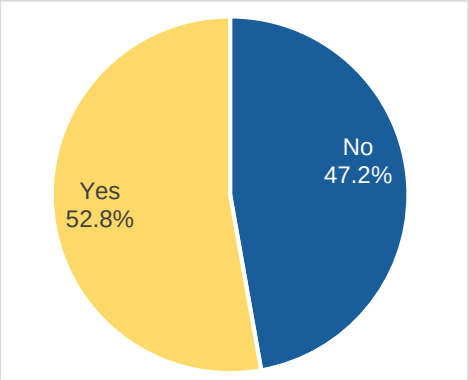
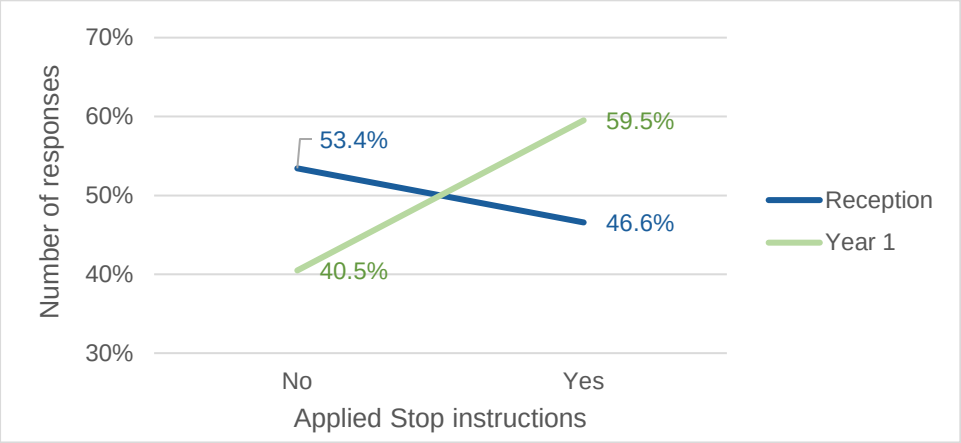


Figure 57: PSC - Proportion of responses stopping after three errors



Among the teachers interviewed, the stop instructions were the only element of the PSC that presented problems and/or caused confusion in relation to administering the PSC. Some teachers noted that despite the school's best efforts to establish a consistent approach to administering the PSC, staff within the school interpreted and actioned the stop instructions differently.

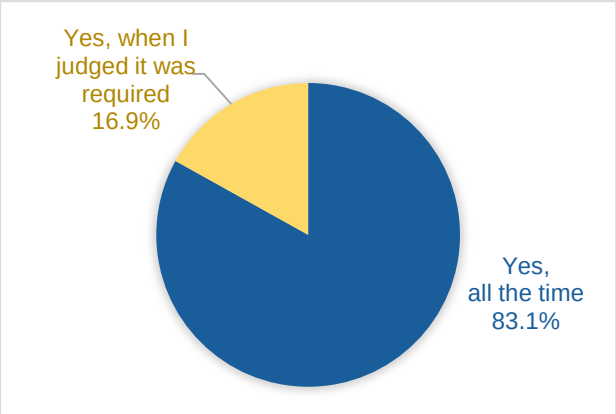
The most commonly reported process overall was to *technically* follow the instructions (i.e. stop scoring at the point of three incorrectly pronounced real words) but to informally proceed through the PSC to see how students would perform on the rest of the check. Some teachers ignored the stop instructions if they felt that their students would know words in the next list as they considered it would be unfair (unreflective of students' abilities) to stop where prescribed. Some attributed this unfairness to the unfamiliar font: '*we know the kids, we can see what's happening for example if they're struggling with the letters f, j and k because of the font, we know that might not happen if we progress them to the next list*'. A number of teachers continued with the PSC because their students actively wanted to keep trying.

Teachers who did stop at the prescribed point but continued informally out of curiosity to see how the students would perform on the PSC as a whole described feeling very disappointed about the enforcement of the stop instructions. Many, particularly Year 1 teachers, felt their students could and would have achieved higher overall scores if allowed to continue.

Use of the practice sheet

All teachers administered the practice sheet at least some of the time prior to PSC administration - more than four in five (83.1%) using the practice sheet all the time and the remainder (16.9%) applied it selectively, making a judgement about when it was required (see Figure 56). This would suggest that a consistent approach to introducing the PSC was not used with all students. We note that teachers who reported making judgements about when to use the practice sheet did not believe there was a lack of consistent approach used in implementing the PSC (see Figure 52). Although statistical difference was not found there was a tendency for country teachers to use the practice sheet more routinely. There was no difference between teachers of Reception, Year 1 or mixed classes.

Figure 58: Survey – Use of practice sheet with students before administering PSC

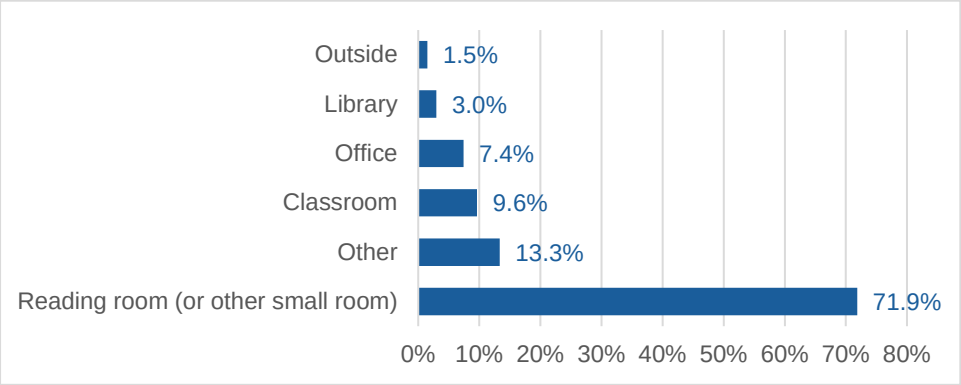


Most of the teachers consulted commented that they did use the practice sheets and that these were a valuable resource in preparing the students for the task ahead. Almost none of the teachers had exposed their students to pseudo-words prior to conducting the PSC and the practice sheets provided an opportunity to introduce the fun concept of a ‘monster language’ as a way to ease students into the task of sounding and blending pseudo-words.

Location of PSC administration

Seven in ten (71.9%) teachers administered the PSC in a reading, or other small, room (see Figure 57). And while one in ten (9.6%) delivered it in a classroom, it is unclear whether this classroom was full or empty of students. Teachers conducting the PSC outside, in the library or an office were likely to administer the PSC in multiple environments. Those indicating they conducted the PSC in ‘other’ places (13.3%) were most likely to have delivered it in shared environments with potential for interruption such as in the middle of open space units or hallways, or in wet areas, kitchens or store rooms.

Figure 59: Survey – Location for completing PSC



Multiple response options are possible.

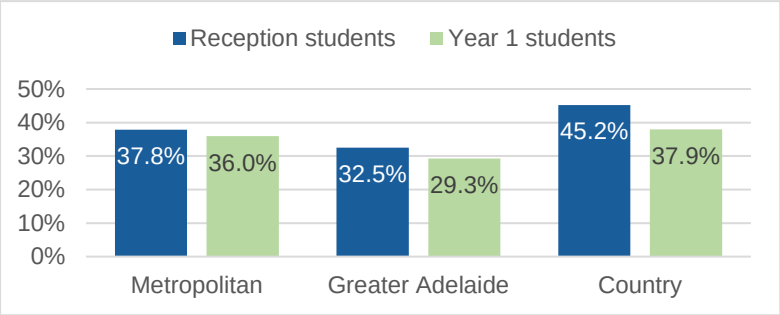
Most of the teachers managed to secure what they described as a quiet, private space to conduct the PSC, sometimes in a free office space, otherwise in a 'break out space' such as a classroom wet area, or in a teacher prep room (which had to be negotiated/booked with other teachers to secure the space). Finding a private space was sometimes difficult because multiple teachers were released at the same time to do the PSC which put pressure on the few withdrawal spaces available. Where schools were principally open-plan environments, teachers reported managing to withdraw to areas free of activity and distraction to undertake the PSC. One identified issue was the need to secure a space not too far from the classroom, to minimise the time involved in walking students to and from the PSC location. All teachers emphasised that the PSC would be impossible to administer in the busy classroom area, hence the key importance of teacher release time.

3.2 Experience of the PSC – how was it received by students and staff

3.2.1 Perceived student experience of the PSC, by reading skill level

Teachers participating in the survey reported conducting the PSC for an average of 10.5 Reception students and 8.8 Year 1 students. These teachers identified an average of 3.7 (35.5%) Reception students and 2.8 (32.1%) Year 1 students in their class as 'struggling readers'. Although no statistical differences were found (potentially due to the low number), Figure 60 presents the proportion of struggling readers by region.

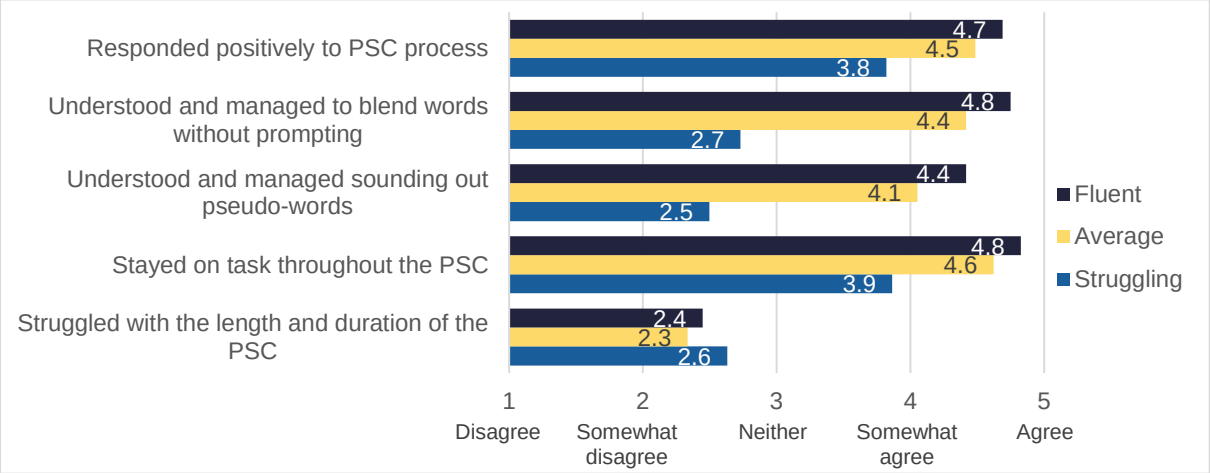
Figure 60: Survey – Proportion of struggling readers, by year level



Teachers rated the experience of struggling readers statistically lower than average readers, who in turn were rated statistically lower than fluent readers on four of the five statements about the

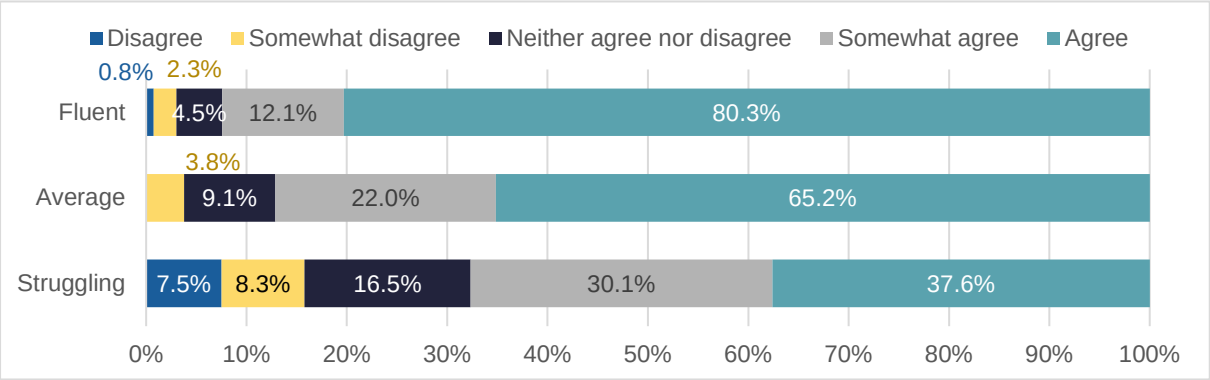
PSC process (see Figure 61)[27]. However, we note that for these statements the difference between students identified as fluent and average readers was relatively small - between 0.2 and 0.3 points - and ranging from Means of 4.1 to 4.8 indicating these students were usually on task, responding positively to the PSC and able to pronounce the words. In contrast, the Mean difference between struggling and average readers ranged from 0.7 indicating some agreement that struggling readers responded positively to the PSC process and stayed on task, through to 1.6 relating to some disagreement that struggling readers could understand and blend words without prompting, or sound out pseudo-words. There was no indication that struggling readers had more difficulty than others with the length and duration of the PSC.

Figure 61: Survey – Rating student experience, by reader skill level ($\bar{X}$)



It is evident that teacher agreement with the first four statements was strongest for fluent readers. Around four in five teachers reported fluent readers responded positively to the PSC (see Figure 62), were able to blend words without prompting (see Figure 63) and stayed on task (see Figure 65). In contrast one in five teachers disagreed that struggling readers could blend words without prompting, and one in four disagreed they could sound out pseudo-words (see Figure 64). The length and duration of the test (see Figure 66) was not considered a major issue for most students, although one quarter of teachers felt it was an issue for fluent readers (noting their Check experience would typically be longer due to their greater capability).

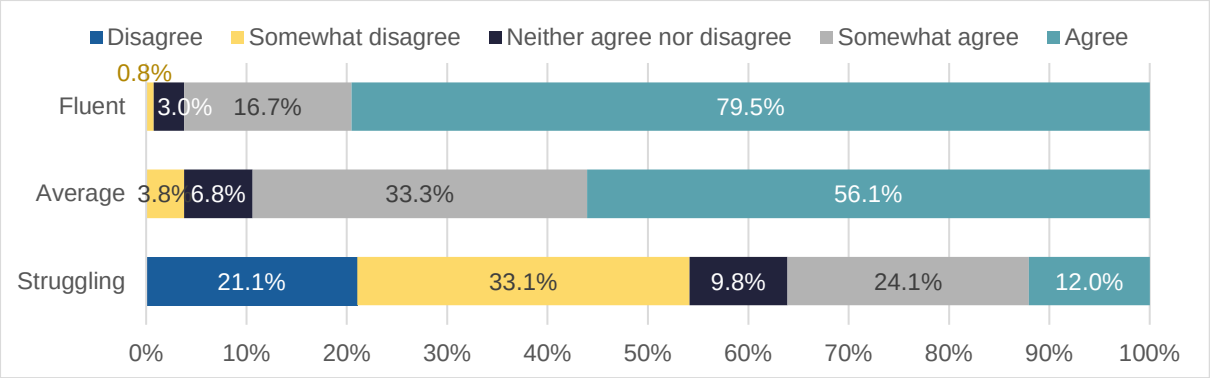
Figure 62: Survey – Students responded positively to PSC process, by skill level (%)



[27] We note there was consistency of response (and no statistical differences) between Reception, Year 1 and Reception/Year 1 teachers regarding how struggling, average and fluent students experienced the PSC.

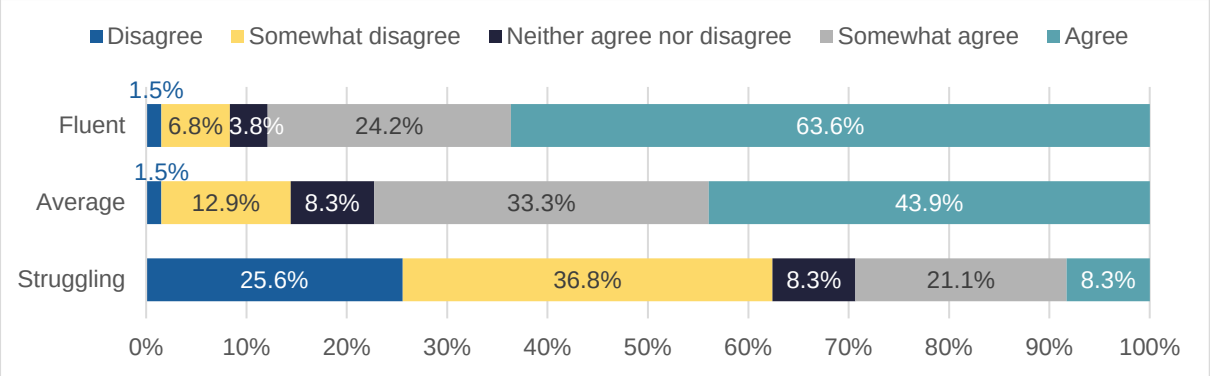
Note, unsure or not applicable data not presented

Figure 63: Survey – Students understood and managed to blend words without prompting, by reader skill level (%)



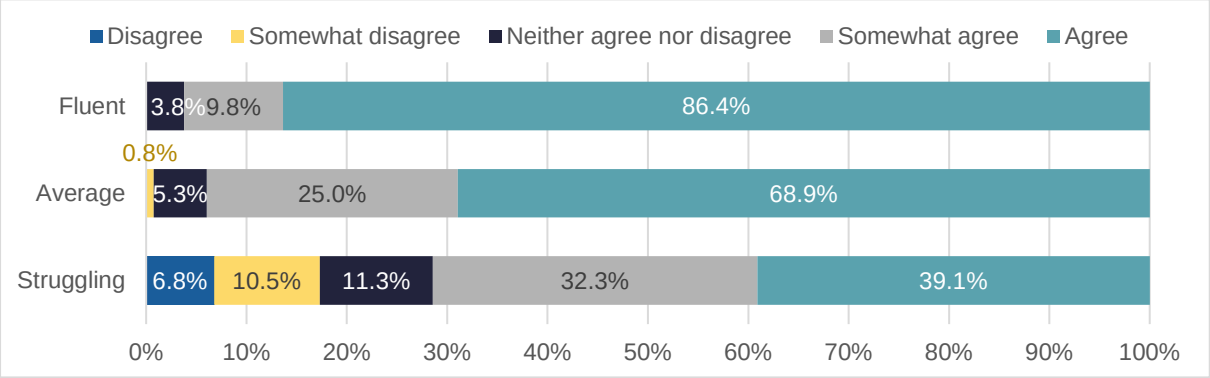
Note, unsure or not applicable data not presented

Figure 64: Survey – Students understood and managed sounding out pseudo-words, by reader skill level (%)



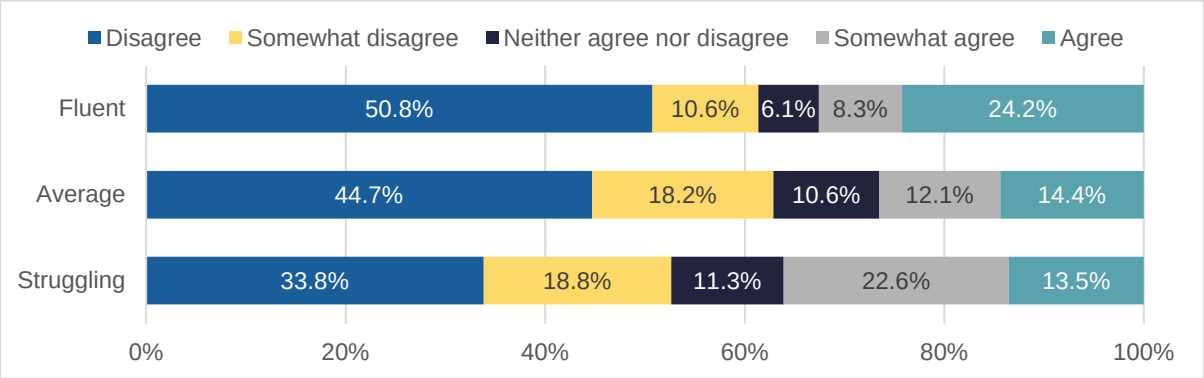
Note, unsure or not applicable data not presented

Figure 65: Survey – Students stayed on task throughout the PSC, by reader skill level (%)



Note, unsure or not applicable data not presented

Figure 66: Survey – Students struggled with the length and duration of the PSC, by reader skill level (%)



Note, unsure or not applicable data not presented

The leader and teacher interview findings supported the survey findings in terms of students across both Reception level and Year 1 responding positively to the PSC experience, staying on task throughout the process and finding the length and duration of the PSC easy to manage. There were no reports of students experiencing stress or anxiety.

Teachers universally commented that all students 'loved' the one to one time with the teacher doing the PSC. Students were highly interested and engaged by the 'monster format' of the PSC – some teachers even identified that this was a bit distracting for some students but worth it because it made the task fun for the children. It was also consistently observed that students in South Australian schools are highly familiar with testing regimes (Running Records, PASM and a whole range of other tests), are comfortable with their classroom teachers and teachers often downplayed the PSC to make it less pressured and intimidating for students (i.e. it wasn't presented as a test of their skills but a way of checking how they are going). The fact that the PSC was short, easy and fun also helped with keeping children engaged.

In terms of performance, leaders and teachers noted that student performance on the PSC was quite low, particularly among Reception students. This prompted some to question whether the PSC is appropriate for Reception students who are very early in their phonics learning. One leader commented that in the UK the first PSC is applied in the last term of Year 1, almost two years post commencing school and phonics learning, and expressed surprise that DECD chose to apply it so early.

Some teachers attributed the poor performance of Reception students to the timing of the PSC, as they had not yet covered areas tested in the PSC in class. It was noted that the teaching of Jolly Phonics in the UK follows a strict sequencing whereas South Australian teachers have greater freedom to adapt and modify the program, including the sequencing of which skills are taught when. This is a complicating factor when applying the PSC earlier (start of Term 3) rather than later in the year/term. A number of Reception teachers also noted that phonics skills seem to 'switch on' for their students around the end of Term 3.

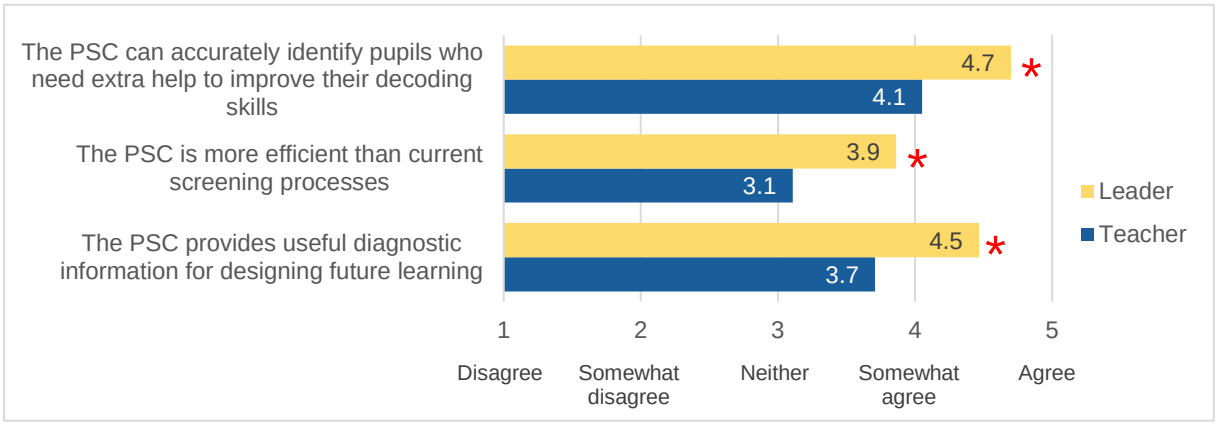
More generally, it was observed by leaders and teachers alike that students did more poorly than was expected, across the board. Numerous respondents reported feeling surprised and disappointed by the results based on students' known reading abilities and results on the Running Record. Some attributed the low scores of otherwise strong readers to the fact that they were 'thrown by the pseudo-words' and would persist in using alternative strategies which was acceptable in their view. Others reflected that the PSC showed them that while the students were good at reading (based on solid word banks, memorised words), they were not as proficient in their ability to break down sounds and blend words (executing phonics strategies). For many, the PSC was a 'good eye opener for teachers' and 'prompted thinking and discussion about ways to

manage gaps'. Some recognised that this was important as phonics skills are critical for navigating more complex reading requirements in middle primary years: '*some students are good at memorising words and using alternative strategies, but they need to be able to decode, sound and blend in order to progress to later years. Those who memorise get stuck in years 2 and 3 if they don't have phonics skills'*.

3.2.2 Views of the value and utility of the PSC

Leaders were statistically more likely than teachers to agree the PSC had value and utility. All leaders agreed (or somewhat agreed) that the PSC could accurately identify pupils who needed extra help to improve their decoding skills ($\overline{X}$=4.7, compared with $\overline{X}$=4.1 for teachers; see Figure 67)[28]. Noting that approximately one in eight teachers disagreed with the statement to some extent (see Figure 68). Leaders ($\overline{X}$=4.5) also believed the PSC provided useful diagnostic information for designing future learning, compared with $\overline{X}$=3.7 teachers[29]. We note that just over a third (36.7%) of leaders only somewhat agreed with the statement, and one in five (20.9%) teachers disagreed to some extent (see Figure 70). Leaders were more inclined than teachers to believe the PSC was more efficient than current screening processes ($\overline{X}$=3.9 and $\overline{X}$=3.1, respectively)[30]. However, teacher responses to this were particularly ambiguous, three in ten (30.5%) neither agreed nor disagreed that the PSC was more efficient that other screening, and a similar number (29.0%) disagreed (at least to some extent) with the statement (see Figure 69).

Figure 67: Survey – Perceptions of the value and utility of the PSC, by role ($\overline{X}$)



** indicates statistical differences were found*

[28] t(117.0)=-4.9, p<.001
[29] t(75.5)=-4.4, p<.001
[30] t(158)=-2.8, p<.01

Figure 68: Survey - The PSC can accurately identify pupils who need extra help to improve their decoding skills, by role (%)

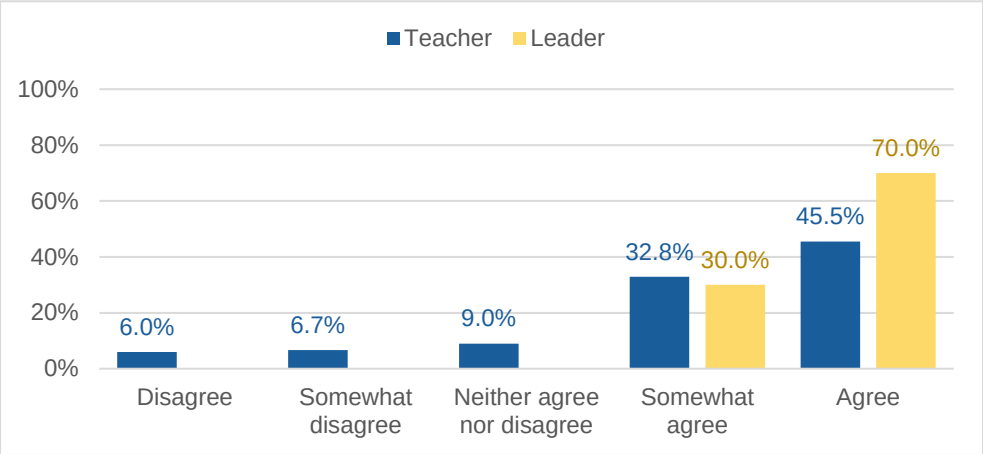
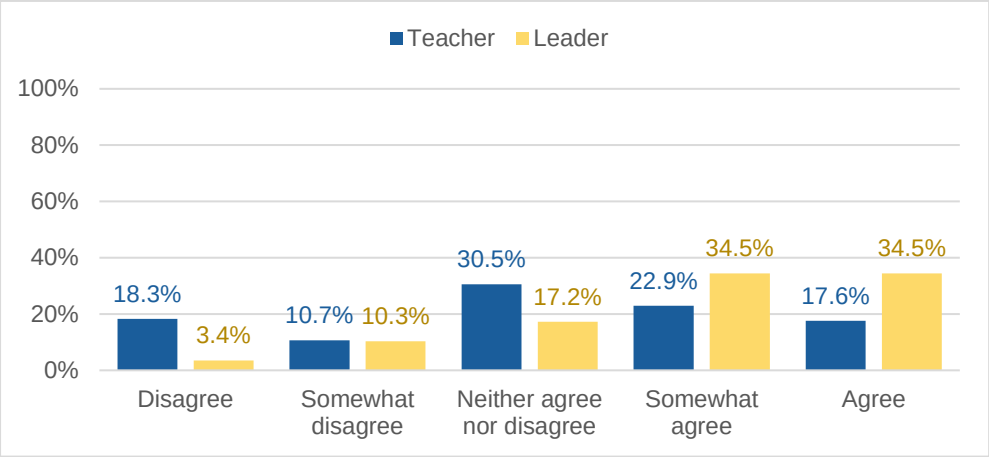
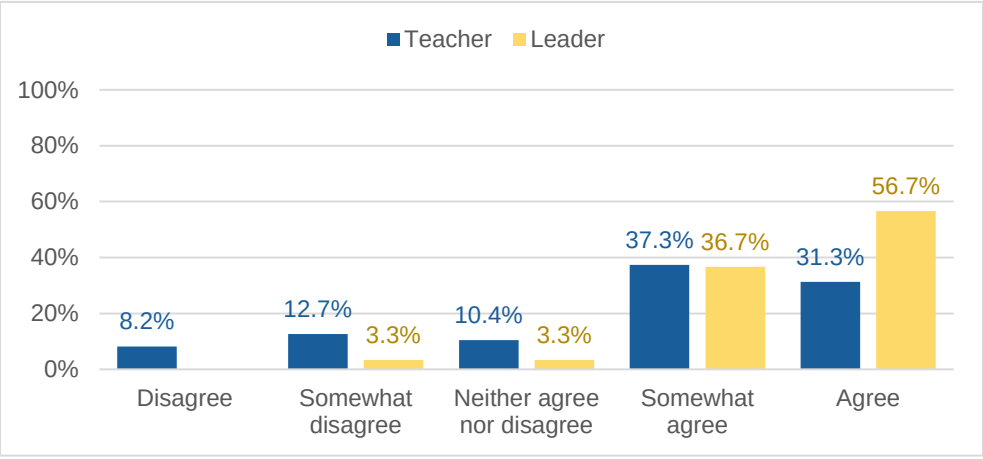


Figure 69: Survey - The PSC is more efficient than current screening processes, by role (%)



Note, unsure or not applicable data not presented

Figure 70: Survey - The PSC provides useful diagnostic information for designing future learning, by role (%)



Similar to the survey findings, the majority of leaders consulted were enthusiastic about the potential of the PSC to provide useful information about students' phonics development. One commented that the PSC did not add anything special beyond what they already knew about their students' abilities and stage of development, particularly in schools with a strong testing and

monitoring regime already in place. However, the tool was still considered a useful instrument for triangulation and adding another dimension to other collected data for example Running Records, screening tests, Mini-lit, Pre-lit, and teacher observations.

Particular areas of value offered by the PSC include:

- Enables leaders to evaluate data collected in a consistent, standardised way[31], provides a consistent, easily comparable measure of where students are at: '*same test, same simple procedure applied across all children*'.
- Highlights gaps in phonics learning, particularly in relation to blending words (as opposed to identifying sounds) as no other test specifically provides this information: '*we are pleased that the PSC has allowed us to collect this information, it is great for our system and for putting interventions into place'.*
- Gives school leadership an indication of where individual students sit at a particular point in time and how they are tracking over time (flagging students with problems, knowing who to stream into support programs such as MiniLit), knowing if/where conversations are needed with teachers and parents. Enables leadership to '*track progress across the whole school site, establish if our work is translating into expected outcomes, compare how classes are performing and put measures in place to equalise phonics learning opportunities across the whole early learning setting*'.
- Identifies children that may otherwise be slipping under the radar, in particular those who are good at memorising words but haven't learned to decode properly: '*the PSC enables these children to be identified and conversations to be had with teachers and parents about how to develop Phonics skills at school and at home*'.
- Considered by one leader to be a valuable diagnostic tool in the context of a school with a diverse group of students, including high levels of disability, speech pathology intervention, poverty, Aboriginality and experience of trauma.

Also in line with the survey results, teacher perceptions about the ability of the PSC to identify students who require extra help were positive albeit somewhat more muted than leaders. Teachers generally found the PSC data 'interesting', although many said the data did not reveal anything they didn't already know or flag any children that needed intervention (many identified themselves as very experienced teachers), but helped to consolidate/reinforce what was already known about students abilities. Some said that the PSC did test some new areas of children's phonics development which was useful. The tool was valuable in that it identified that while some students are good at sounding words, they struggle with blending. Many teachers used this information to revisit their teaching focus and are now doing a lot more explicit teaching of sounding and blending.

Teachers regularly flagged that school leadership was driving the phonics agenda particularly strongly, however while some teachers were equally enthusiastic others were slightly more sceptical about this 'new line being rolled out of government'. One teacher expressed the view that the PSC provides a limited scope of information about letter recognition and blending skills to the exclusion of segmenting and writing and should not be considered 'the be all and end all'. Another teacher observed that the PSC confirmed what was already known through the current testing regime at the school (e.g. Running Records, PASM, Oxford Words, sight word recognition, BOEHM, oral language assessment). Others understood that the PSC is not a reading assessment but a phonics assessment and that while phonics is just one part of a bigger picture, '*it is a critical first step*'. This may explain why the PSC was not generally seen as more

[31] Noting this requires a consistent application of the stop instructions within the school.

efficient than other screening processes in the survey results; respondents generally saw the PSC as dovetailing with other data collection processes, serving one purpose among many.

A number of teachers reported that many schools already have a strong focus on phonics teaching, particularly Jolly Phonics with daily lessons comprising a major part of early school literacy learning. The PSC was seen as a valuable tool for monitoring student progress, although complementing what teachers already know by virtue of working through the Jolly Phonics program with students in class: '*the [PSC] simply puts the result on paper which helps to rank students*'. A common observation was that the PSC has scope to provide valuable baseline data for measuring progress from Reception to Year 1.

The following issues and concerns were raised by teachers in relation to the potential of the PSC to identify students in need of extra help:

- A number of teachers felt the timing of the test was problematic, for Reception students in particular and that results would have been more indicative of students' abilities if conducted a little later in the term/end of Term 3.
- The lack of a standard against which to benchmark the PSC results – teachers don't know whether or not the scores are reasonable for Reception/Year 1 level students. They note it would be useful to have a point of comparison with other schools/state-wide.
- Some teachers expressed doubts about applying the PSC to Reception age children. One noted that whereas the UK is very prescriptive in its phonics teaching, this is not the case in Australia – sequencing is not prescribed so some digraphs and blending may not have been introduced to Reception students prior to the Check. Is it fair to check them if they haven't been introduced to the concepts yet? Moreover, Reception students struggle to blend more than three letters whereas Jolly Phonics asks them to blend four letters; hence the PSC is not adequately matched to their developmental stage.
- Concerns that the teaching of synthetic phonics is going to eclipse all other forms of literacy teaching; some teachers highlight that while phonics is important, it is not the only important approach to literacy.
- One teacher believed that there is too much testing already ('*another hoop to jump through*') and that phonics issues should and could be picked up in regular reading and writing exercises.

In terms of designing future learning, from a leader perspective the PSC was deemed effective in initiating conversations about why results transpired as they did and getting early learning teams to think and talk about their direct teaching methodology and whether their approaches were working to maximum potential. One leader noted that the results prompted the team to question whether they do enough 'skill and drill' exposure and whether there is a sufficiently explicit focus on sounding out and blending words and reinforcing this on the white board. Other schools used the results to consider what the next stage should be for their students, for example clustering/streaming children according to need.

Many teachers reported that Jolly Phonics is an established focus in their schools and is mandated for whole of early years teaching. The value and benefits (as well as some limitations) of Jolly Phonics are well recognised, so the PSC is unlikely to have a profound impact on phonics teaching practices in these schools. However, teachers and leaders believed it may exert a greater impact on those schools that have not yet established a systematic phonics teaching approach.

According to both leaders and teachers, a key obstacle to using the PSC results to inform phonics teaching practices was the lack of a standard or 'yardstick' against which to measure students' performance. Schools were arbitrarily setting their own figures, for example one school

set 33 as the standard for Year 1s and 10 as the standard for Receptions, pitching this quite low as Receptions students are very new to phonics learning. In the absence of an agreed standard, teachers talked about not knowing whether their students' results were at an acceptable standard or not so were not sure what action to take with particular students or the class as a whole.

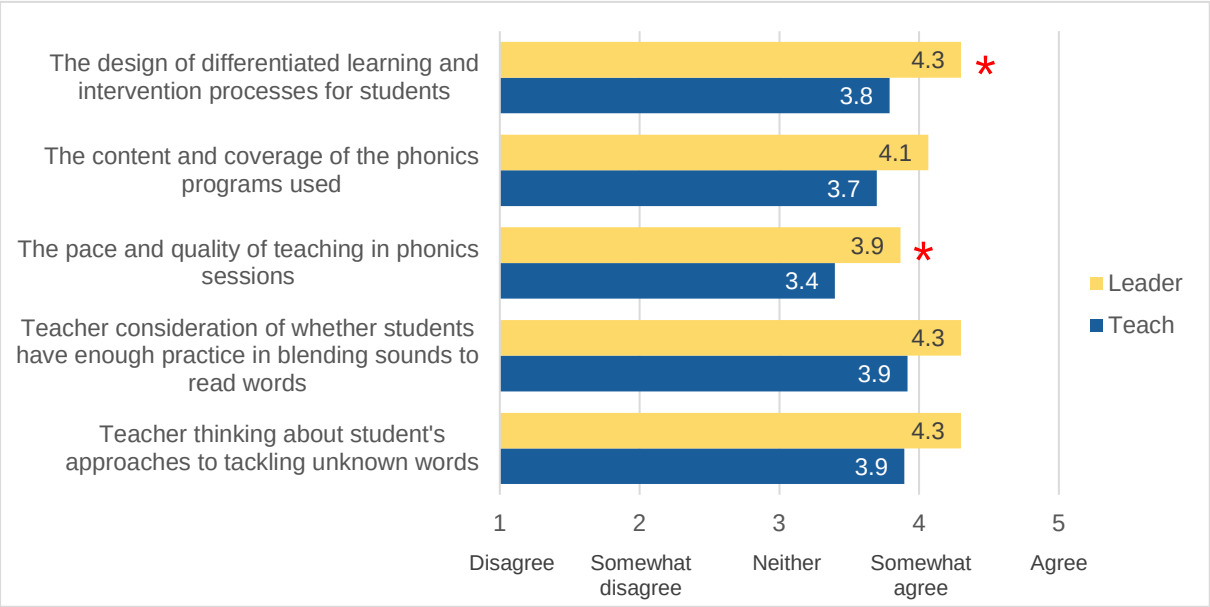
A second key obstacle raised by teachers was the lack of training, information and resources addressed to the 'where to next' of the PSC. This was mainly a problem for the schools that were less experienced in teaching phonics and needed greater support in devising a whole of site and classroom-based response.

3.2.3 Teachers and leaders use of PSC results

There was a trend for leaders to expect that teachers would make greater use of the PSC results than teachers indicated they would (see Figure 71). This reached statistical significance with leaders more likely to indicate teachers would use the results in the design of differentiated learning and intervention process for students ($\overline{X}$=4.3, compared with $\overline{X}$=3.8)[32], and that it would inform decisions about the pace and quality of teaching in phonics sessions ($\overline{X}$=3.9, compared with $\overline{X}$=3.4).[33]

Although not aligning with leader expectations, three quarters of teachers agreed, at least to some extent, that they would use the PSC to design differentiated learning and intervention processes (see Figure 72), that they would use it in their consideration of whether students have enough practice in blending sounds to read words (see Figure 75) and in their thinking about student approaches to tackling unknown words (see Figure 76). Disagreement for these statements ranged from one in five to one in seven teachers. One in five teachers also disagreed that they would use PSC results to inform the content and coverage of the phonics program they used (see Figure 73), while one quarter were unlikely to use the results to inform the pace and quality of teaching in phonics sessions (see Figure 74), with only just over one half offering some agreement for the latter statement.

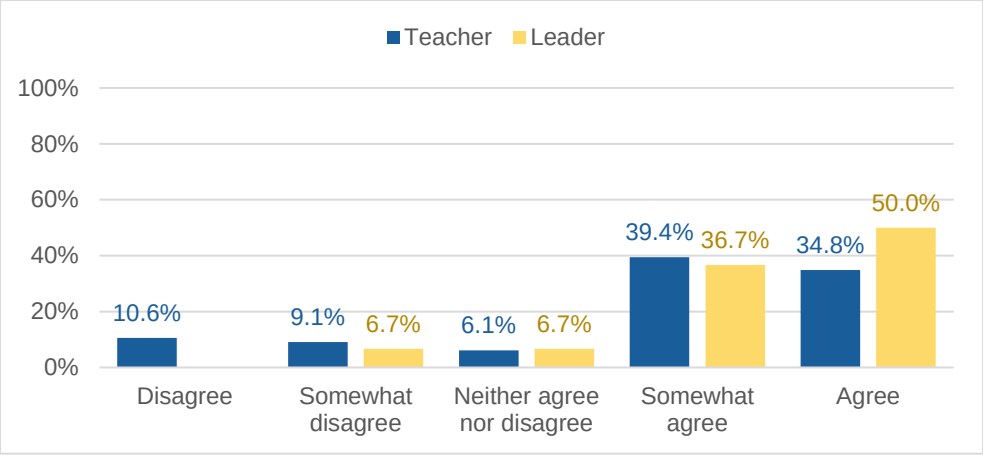
Figure 71: Survey – Teacher use of PSC results, by role ($\overline{X}$)



[32] t(61.9)=-2.6, p<.05
[33] t(52.3)=-2.1, p<.05

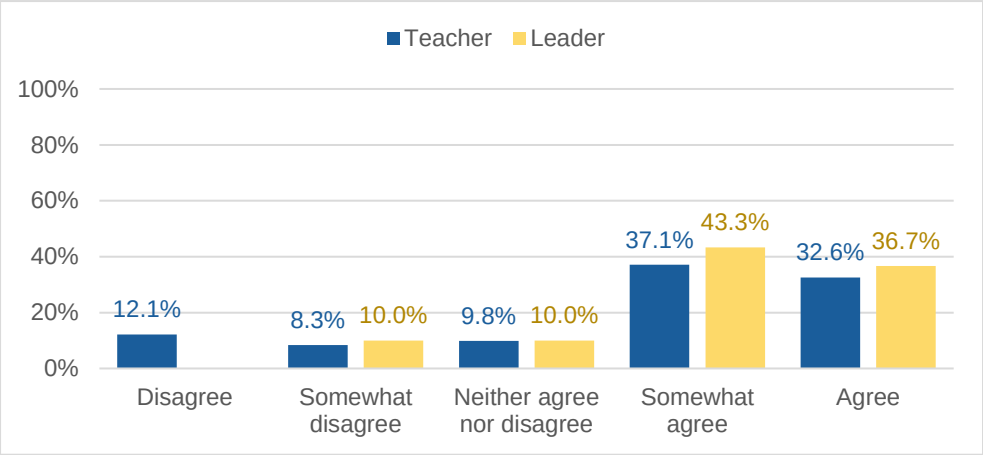
** indicates statistical differences were found*

Figure 72: Survey – PSC results to be used to inform the design of differentiated learning and intervention processes for students, by role (%)



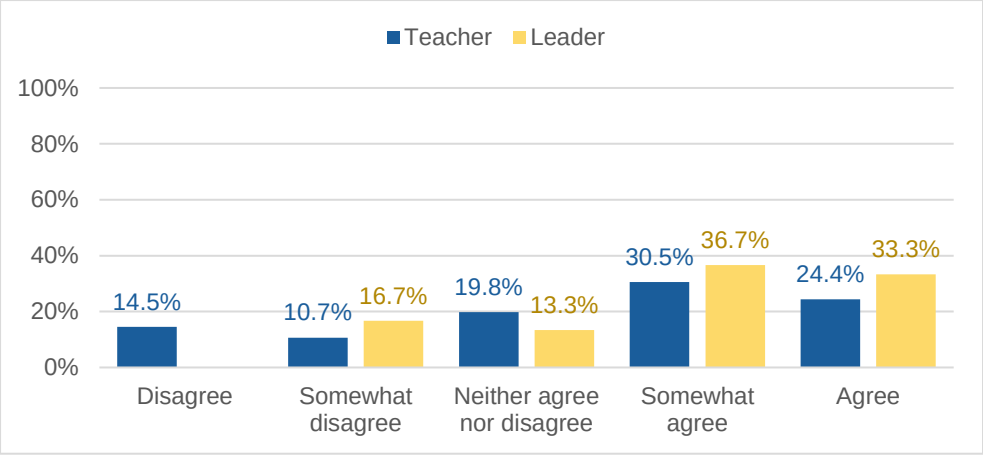
Note, unsure or not applicable data not presented

Figure 73: Survey - PSC results to be used to inform the content and coverage of the phonics programs used, by role (%)



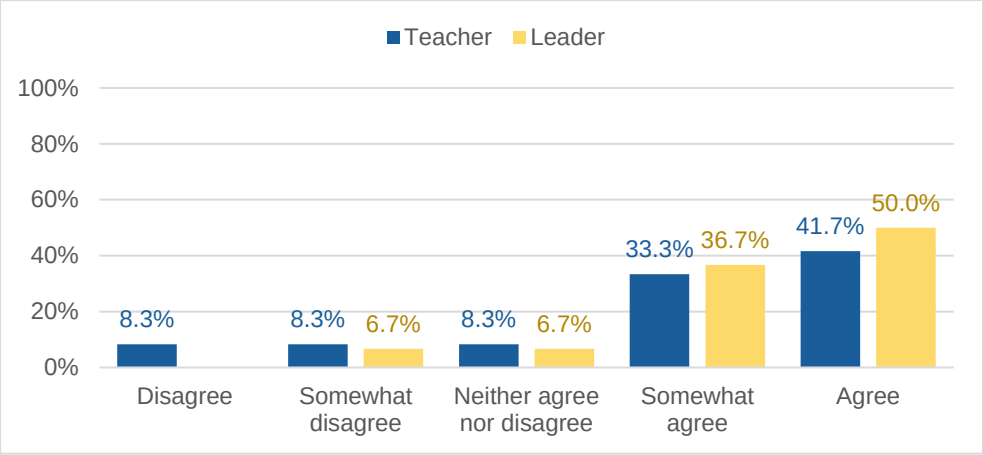
Note, unsure or not applicable data not presented

Figure 74: Survey - PSC results to be used to inform the pace and quality of teaching in phonics sessions, by role (%)



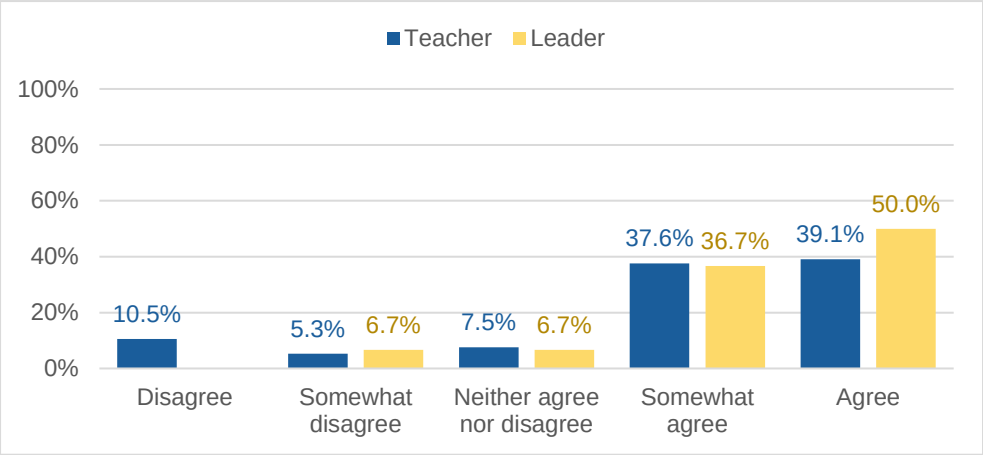
Note, unsure or not applicable data not presented

Figure 75: Survey - PSC results to be used to inform teacher consideration of whether students have enough practice in blending sounds to read words, by role (%)



Note, unsure or not applicable data not presented

Figure 76: Survey - PSC results to be used to inform teacher thinking about student's approaches to tackling unknown words, by role (%)



Note, unsure or not applicable data not presented

Leaders and teachers consulted identified a range of ways that PSC results were put to productive use in their schools and classrooms. There were some schools that stood out in terms translating PSC results into tangible changes in the classrooms and across school sites. These were distinguished by strong leadership and heightened staff engagement with phonics teaching and learning.

The PSC scores prompted much discussion among early learning teams, including detailed discussions about student performance, how to combine PSC results with other assessment tools/data, and how (in the absence of supplied standards) to use the test as a measure of progress/development, for example comparing results with predictions of how teachers thought individual students would rate (self-devised baselines). In one school, teachers met with the principal after the PSC process to discuss individual students' results, to consolidate learnings and discuss implications for the teaching and learning of phonics. The post-PSC conversations were described as '*amazing*'. According to the leader, the PSC delivered insights that teachers did not have before (and they otherwise had good awareness of students' capabilities), and results that really surprised them and made them evaluate what was working/not working and

what refinements were needed. The team grappled with key questions. For example, how to understand the scattered results in the PSC for students who were fine in other Big 6 of reading areas[34] and then to use these insights to develop differentiated plans for individual students.

Leaders consistently reported collating and utilising the data and information from the PSC to respond to individualised needs of students and to shape classroom teaching practices. At a classroom level, teachers devised warm ups and games to assist with learning how to blend words and grouped students according to phonics abilities. In one school, the results were used to flag under-performing Reception children for inclusion in the MiniLit program in the following Year 1 (noting that MiniLit support is expensive and only available to a limited number of students at a time). While MiniLit is not available to Receptions, SSOs were tasked with giving these students a pre-Year 1 phonics 'leg up'.

Teachers provided a similar narrative to the leaders in relation to activating PSC results. Many teachers reported analysing individual student results; some also reported convening (sometimes formally, more often informally) in Year level or Early Learning teams to discuss results and wider implications for the school (in terms of trends and practices). For some the results flagged that students needed to be exposed to more explicit phonics/blending teaching in Terms 1 and 2. PSC results were commonly used to assign SSO support and/or to group students, for example according to whether they needed to focus on sounds, or blending or more advanced strategies (this was already being done in relation to the Jolly Phonics program, but the PSC contributed further to this).

Teachers from one school described a process whereby one Reception class did exceptionally well in the PSC whereas other classes turned out disappointing results. Teachers at the school were intrigued about how and why this one particular class did so well and organised to observe the class at work. They were greatly impressed and highly motivated to follow the highly systematic and structured phonics teaching process in use (Jolly Phonics, daily repetition, multiple methods for reinforcing phonics skills) which led to a site-wide re-organisation of phonics teaching and learning.

In another school, the teachers (both Reception teachers) described how on the basis of their low PSC results they designed an entirely new plan called the Phonics 5 program (modelled on the Daily 5 program but with a phonics focus). Noting that this focus involved scaling back other teaching areas to focus on literacy, the teachers took the plan to school leadership who endorsed it. The Program was trialled in 2017 with current Receptions and the plan is to implement it across the Junior Primary classes in 2018. The Phonics 5 program will involve spending 30 minutes a day focusing on phonemic skills, flash cards, interactive literacy based smartboard programs and focusing on blending. There will also be a heightened focus on phonological awareness skills, for example on rhyming and syllables.

In contrast, some teachers indicated that 'it is hard to know what to do other than to group children according to ability', signalling the need for more guidance about how to interpret and respond to PSC results. These teachers commented that the PSC was '*good for diagnostics but not for the where next*' which is important for the schools that have less evolved approaches to phonics teaching. A few teachers reported going back to 'practice as usual' after doing the PSC (i.e. not translating the results into any kind of practical application), often because there was no guidance about what to do next and no benchmarks to measure results against. One teacher noted that there was no time or opportunity for the site team to convene after completing the PSC process to discuss, reflect, compare and plan for the following year (attributed to a lack of

[34] The Big 6 of reading includes 1) oral language, 2) phonological awareness, 3) letter-sound relationships (phonics), 4) vocabulary, 5) fluency and 6) comprehension.

release time). This teacher also noted shelving the test directly after doing it and 'getting back to what I was doing', signalling the importance of leadership in supporting collaboration around the PSC and giving it greater impact.

3.3 Embedding and sustaining phonics teaching, learning and measurement in South Australian primary schools

There was considerable crossover in the views expressed by leaders and teachers about what is needed to embed and sustain Phonics teaching and learning in South Australian primary schools supported by the PSC. A key theme was the need for DECD to develop a focused and strategic plan to drive phonics development in schools, including providing funding for training and resources. At present there is a perceived schism between literacy programs and phonics development, and a desire for a systematic focus on phonics coming from the Department. Some schools have a site focus on the Big 6, but there is a shared belief that if the PSC was a DECD systems requirement, teachers would be more likely to adapt their teaching practices.

A number of schools identified the value of a site based commitment to action, for example including the PSC as part of the school's literacy agreement so staff see it as non-negotiable. Having a whole school agreement in relation to the use of particular phonics programs (typically Jolly Phonics) was seen by some as instrumental in embedding a phonics focus and gaining site-wide support from teachers. This is also important in terms of achieving a consistent phonics focus approach across whole of school and generating high quality, comparable data.

Leaders and teachers both note that there is considerable resistance in the wider education setting to standardised testing. Leaders commonly argue that standardised testing provides an indication of how students, programs and teaching practices are tracking. They note that teacher observation is important, but it is inevitable that children will slip under the radar – either accidentally or because poor performance is masked. Testing provides solid evidence of how teachers and students are performing in phonics teaching and learning respectively. Teachers on the other hand placed greater emphasis on their professional capacity to understand the strengths and limitations of their students, irrespective of discrete measurement tools. However, most of the teachers consulted supported the PSC as a valuable mechanism for determining the effectiveness of their phonics teaching, with just a few noting '*not being a fan of testing'*, particularly of Reception students.

A number of leaders and teachers commented that if the value to schools of the PSC can be established, then it will be much more sustainable. Value to schools is premised on providing baseline data to map student progress, and if not making progress, then ensuring that support and resources are available to fix the problem, particularly human resources (SSO, support staff): '*Don't bother testing if there's not provision to fix identified problems*'.

There was a widespread view that schools need greater support in relation to the '*teaching practices behind phonics'*. There was a call from leaders and teachers for more professional development and learning around phonics teaching, understanding the data and what to do in the next stage to support children's learning. Leaders and teachers want to know what literacy and phonics teaching looks like in a high performing school, they want to identify and share effective practice, encourage everyone to teach phonics and make it a system wide expectation.

Continuing evidence-based professional development and training are important to reinforce why systematic phonics teaching on a daily basis is critical. Some believe that a one-off induction session is not sufficient to change the mindset of teachers who subscribe in principle to language-based teaching. There needs to be ongoing reinforcement about the importance of

phonics teaching and a wealth of discussion within and between schools and teams about effective, evidence-based phonics teaching practices.

On a more practical level, leaders and teachers were unanimous in the view that the PSC cannot successfully be implemented in classrooms (too many distractions), which means formalised release provisions are essential. Teachers noted that the time taken to implement the PSC was less than expected (it was easier and faster than people anticipated, provided there were no interruptions/distractions), while one leader commented that it is '*a very worthwhile couple of half days to get a really good picture of where students are at*'. Moreover, it was consistently argued that classroom teachers must administer the PSC, as they are best placed to ensure students are comfortable and stress-free and to make informed adaptations/assessments based on a personalised knowledge of students (e.g. in the context of scoring students with speech impairments). There is a widespread concern that release funding will be provided for a limited period of time before PSC implementation converts to within classroom time (as per Running Records). Teachers are insistent that classroom distractions will adversely affect children's PSC scores.

There were different views about the ideal timing of the PSC. One leader was of the view that the PSC should be undertaken at the end of one full year's phonic teaching for Reception students (it is only then when the 'penny has dropped') to inform how best to manage individual students moving into Year 1. Others considered that the August timing was useful because it allowed teachers to adapt to individual and class needs for the remainder of the year. Many were highly in favour of repeat testing to check whether students were progressing as expected. The point was made that for the PSC to be a sustainable tool, the data must be inherently useful for leaders and teachers - '*not collected for the sake of collecting'.* This extends to creating opportunities for teams to convene and discuss results and to forward plan, and opportunities to reconvene at a state (EDC) or regional level to discuss implementation, results, and to share ideas and what others have done.

Based on their participation in the trial, leaders and teachers identified a range of key supports and resources that might help to embed and sustain phonics teaching, learning and measurement in South Australian primary schools. These include:

- Establishing phonics teaching as a DECD imperative, making phonics teaching compulsory/a DECD requirement.
- Teacher training to focus more on phonics as graduates are lacking in phonics teaching skills; top-up professional development for existing teachers, e.g. an advanced course in Jolly Phonics.
- Acknowledging and catering for the additional costs/burden incurred by regional and remote schools for attendance at PSC training and securing release teachers. Consider the possibility of training a site-based coordinator who can convey the training to teachers, providing consistency in method can be guaranteed.
- Agreed standards to sit behind the testing so schools can know where they are tracking in relation to the state picture, know whether they are under/over achieving.
- Greater guidance/direction about how to respond to results, what are the next steps now that student/classroom/school performance on the PSC are known: '*if there is a problem, then go here and here*'. Preferably a state-wide approach.
- Ensuring that PSC and other phonics resources are ready to go and easy to access; teachers liked that the PSC resource kit was complete, comprehensive and easy to implement.

  Adapt the PSC resources for use in a South Australian setting; as a priority, change the font to an SA-friendly font, secondary to that, produce the instructional video in an Australian accent.

4 Conclusion

The PSC was well received by teachers and leaders who also reported students were engaged by the activity and responded well to the one-on-one time. There was general agreement that the preparation and PSC support materials were well structured and that teachers felt confident to administer the Check. Leaders were more likely than teachers to recognise the value and utility of the PSC and had greater expectations that the results would be used to tailor class teaching methods. Leaders particularly appreciated the value of a consistent standardised measure that could be uniformly applied and identify gaps in phonics learning.

The key PSC administration issue revolved around a lack of clarity in instructions for stopping the Check, which provides guidelines - rather than rules - for stopping[35]. This approach to stopping recognised the teachers' knowledge of their students and promoted teacher agency, with teachers encouraged to apply their best understanding or best judgement about when to stop administering the test. Some stopped arbitrarily after three consecutive errors and others continued when they believed the student could answer subsequent words and/or when they thought it would benefit the student. Notably some re-started the test at the next real word (when ceasing during pseudo-words), while others did not. Accordingly, different approaches to stopping and re-starting the Check means that student results are not directly comparable – except where the stop decisions are applied uniformly (for example within a class or school).

In South Australia, the PSC was administered to both Reception and Year 1 students. This has demonstrated the overall phonics learning that occurs between the first two years at school, with Year 1 students achieving 11 more correct words than Reception students. In the event the PSC continues in its current form, individual student progress in Year 1 should be assessed from the Reception baseline which could prove valuable for teachers and schools.

Additionally, if the PSC continues to be applied for Reception students, further consideration should be given to its timing. In the UK school year commences in September of one year and finishes in July of the following year[36]. Therefore, the UK PSC which is scheduled for the end of June occurs toward the end of the school year. In South Australia, the PSC was scheduled to be administered in early to mid-August which was shortly after commencement of the second semester[37] and therefore only halfway through the school year. Teachers and leaders expressed some concern that phonics learning occurs toward the end of the year for Reception students, which was not captured due to the timing of the PSC.

Teachers and leaders participating in the evaluation recognise the importance of phonics learning. Leaders consistently flagged the huge difference Jolly Phonics has made to student literacy outcomes, where it has been applied. The PSC presents an opportunity to provide rich, research/evidence-based direction about programs that support phonics and phonological awareness in students. However, a clear gap in the current PSC support materials was the lack of information about how teachers and leaders can interpret the results and suggested resources and areas for focus.

[35] These instructions are different to those applied in the UK where it is expected that students complete the entire Check. Any decision to stop should only be taken if the student has shown what they can do and, for example, are too fatigued to continue.
[36] The end of the UK school year varies between districts, but is approximately the third week of July.
[37] Semester 2 commenced 24 July 2017.

Appendix A: Survey characteristics

All teachers and leaders engaged in the PSC were sent an email inviting them to participate in an evaluation survey. A similar proportion of teachers (55.6%; 149 of 268 teachers) and leaders (55.2%; 32 of 58 leaders) responded to the survey. No statistical differences were found for the slight variation in responses per region (see Figure 77). A teacher and/or leader from all 56 schools participated in the survey. Multiple teachers were invited and participated from most schools (see Figure 78) with only four (7.1%) schools not represented by teachers in the survey – but with participating leaders. Two thirds of schools had two or more teacher responses to the survey. Fifty-eight leaders from 56 schools were invited to participate with leaders from 44.6% of schools not responding.

Figure 77: Survey - Distribution of teachers and leaders by region

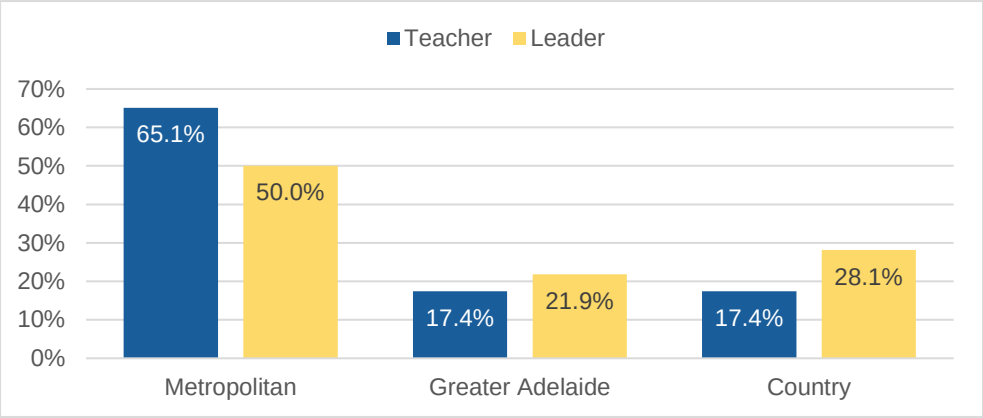
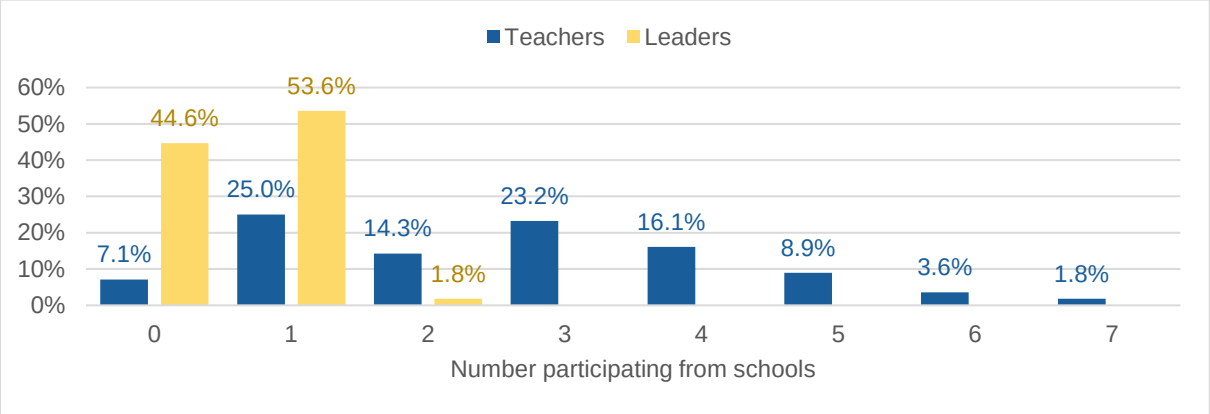


Figure 78: Survey – Number of teachers and leaders participating from schools

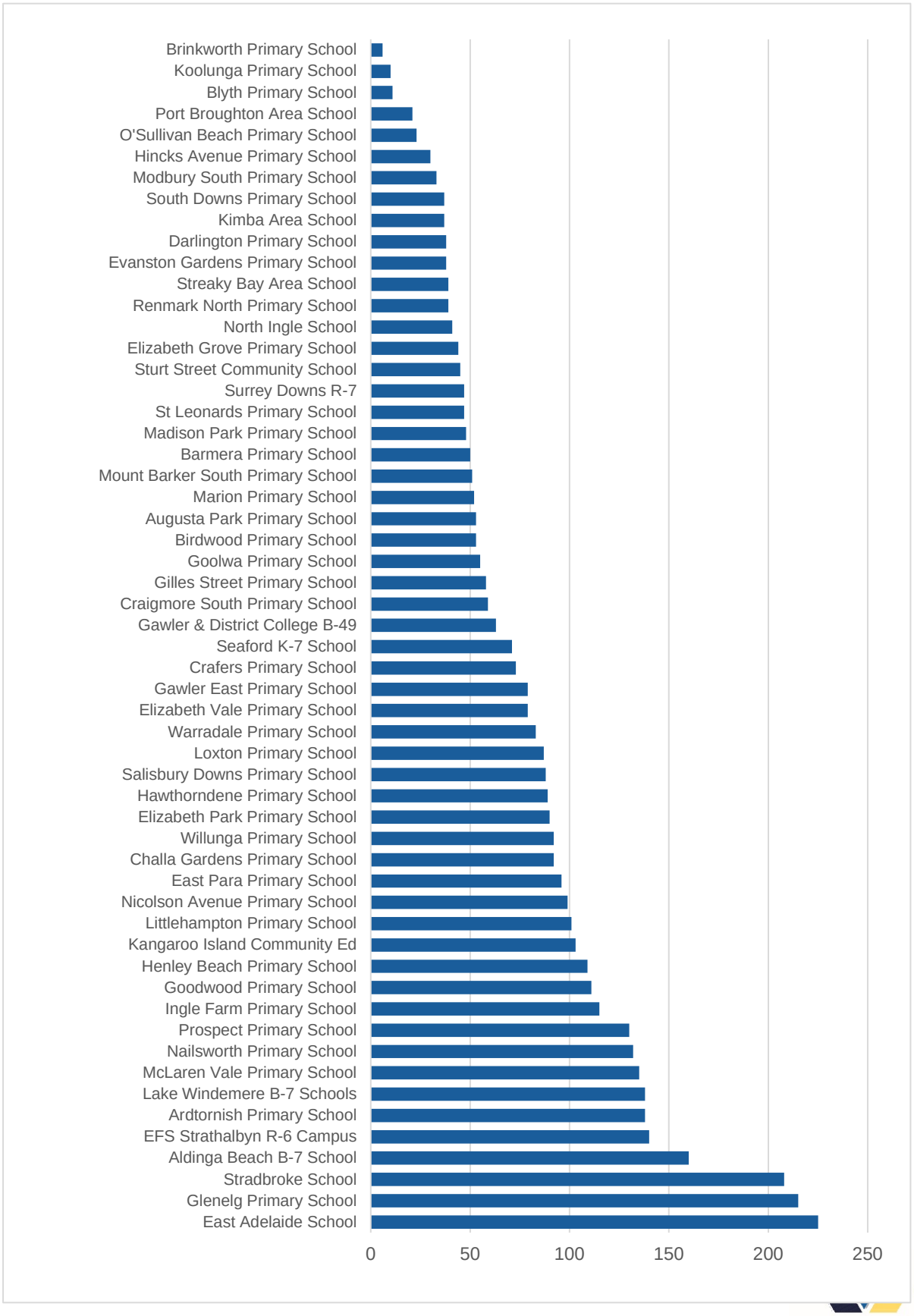


Participating teachers represented all class types equally with one-third teaching Reception students only (33.1%), one third teaching Year 1 only (32.3%) and the remainder teaching both Reception and Year 1 students (34.6%). Teachers were statistically younger than leaders (44.1 years and 53.4 years, respectively)[38] with an age range of 22 to 71 years, compared with 40 to 66 years for leaders. Leaders had taught for statistically longer (25.1 years)[39] than teachers who had a combined average of almost two decades (18.3 years) teaching experience. Leaders also reported an average of 10.5 years of experience as leaders or principals.

[38] t(60.6)=-5.6, p<.001
[39] t(179)=-2.9, p<.01

Appendix B: PSC school participation

Figure 79: PSC - Participation by School



Australian Industrial Transformation Institute
College of Business, Government and Law
Flinders University
GPO Box 2100
Adelaide SA 5001
P: 08 8201 5083
E: aiti@flinders.edu.au