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Teacher Practice: A Spotlight on the Use of Feedback and Conferencing in the First Year of Schooling

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Abstract: With the prevalence of statements that refer to a need to “bridge”, “narrow” or “close” gaps in achievement it would appear that Government bodies have an appreciation for the fact that students need not be victims of circumstance. In addition to this, research has suggested that certain skills, such as the acquisition of phonemic awareness, need to be acquired in the early years to ensure that children do not fall behind their peers. Use of feedback is one way in which teachers have attempted to positively influence student outcomes. There are authors, however, who have suggested that not all forms of feedback are necessarily effective. In light of these perspectives, this study sought to investigate whether the incorporation of student/teacher conferences into a pre-existing program could be seen to support the development of phonemic awareness skills of students in their first year of schooling.

Introduction

“every child, every opportunity”
(DEECD, 2008)

Australia's Department of Education and Early Childhood Development (DEECD) embraced the above-mentioned maxim, much as the United States did with their “No Child Left Behind Act” of 2001 and Britain’s release of “Every Child Matters” in 2003. Though not without their critics, these policies sought to address the problem that “too often emphasis is given to the nature of the child’s environment or background rather than on how a teacher should teach” (Australian Government: Department of Education, 2005, p.12). With the prevalence of statements that refer to a need to “bridge”, “narrow” or “close” gaps in achievement (Auditor-General, 2009; *Every Child Matters: Presented to Parliament by the Chief Secretary to the Treasury by Command of Her Majesty*, 2003; *No Child Left Behind Act*, 2001; “State of Education in New Zealand 2008,” 2008), it would appear that Government bodies have been seeking to affirm and empower educators with the appreciation that students need not be victims of circumstance.

In their Longitudinal Literacy and Numeracy Study involving nearly 1000 children in all Australian states and territories, Meiers et al. (2000) tracked students in their first three years of schooling to find that despite students from all of the participant schools showing variations in school entry performance, there were significant differences in growth rates between schools. Literacy outcomes were the most noteworthy with growth rates remaining similar between students in the same school (5 percent growth rate variation) compared with

a difference between schools of 95 percent (Meiers et al., 2000). These findings suggest that schools and teachers have the capacity to influence student outcomes.

In addition, research also suggests that certain skills, such as the acquisition of phonemic awareness, need to be acquired in the early years to ensure that children do not fall behind their peers (Australian Government: Department of Education, 2005; Juel, 1988; National Reading Panel, 2000; K. Stanovich, 1986), which may imply that the ability to close gaps in achievement may also lie in the timing of program delivery.

Use of feedback is one way in which teachers have attempted to have a positive influence on student outcomes. There are authors however, who have posited that not all forms of feedback, or what teachers often refer to as “feedback”, are necessarily effective. Research into the practices of the more effective teachers identified in the Meiers et al. (2000) study for example, found that the teachers who made up this group made use of feedback that was explicit in nature, compared to the more general feedback given by teachers who were found to be less effective (Louden et al., 2005). This might in part be due to difference of interpretation, with those who have specialised in this area positing that “feedback involves information used, rather than information transmitted” (Boud & Molloy, 2013, p. 702).

This study sought to investigate whether the incorporation of individualised, specific and timely student feedback and the introduction of student conferences into pre-existing teacher practice might help to support the development of early reading skills with students in their first year of schooling. Due to the young age of the participant group, the study also sought to investigate whether this change in practice would privilege students who entered school with more advanced academic skills than their peers. Given the breadth and complexity of what has been considered to contribute to the development of reading, only one academic performance element was considered for the context of this study: the naming of letter symbols and identifying a letter’s most common sound, a subset of the development of phonemic awareness. In addition, for the purpose of this study, feedback was defined as the use of timely and explicit information on student literacy performance, while the “conference” referred to a one to one conversation held between the teacher and student where this feedback on literacy performance was shared and discussed.

Specifically, this study used a mixed methods approach (Creswell & Plano Clark, 2011; Tashakkori & Teddlie, 2010). Quantitative data was collected in the form of student results from a test that assessed students’ abilities to name and identify letter symbols and sounds. Qualitative data was gathered from an interview with the classroom teacher, Mandy, and the collection of teacher program documentation. This paper presents findings from the quantitative data and their implications for teacher practice.

Influencing Outcomes

From investigations into the common practices of high performing, high poverty schools, to that of schools with students of ethnic backgrounds, researchers have long been intent on demonstrating that students can achieve irrespective of their backgrounds. This has been echoed in many national and state government administrative circles. Most recently within the Australian context, Minister Hall and Minister Dixon of the Victorian State Government released a discussion paper entitled, “New Directions for School Leadership and the Teaching Profession” (2012). This paper highlighted the State’s assertion that the next step towards improving student performance would necessitate rigorous reform with a focus on ensuring that quality teachers and school leaders are providing Victorian students with a quality education. Specifically, this discussion paper states that: “Improving the quality of teaching in our schools is the single most critical factor that can push our students to match

the performance of the global top tier” (*New directions for school leadership and the teaching profession: Discussion paper, June 2012*, 2012, p. 5). Such statements raise the issue of the challenge to identify “quality teaching”.

Mcgee (2004) investigated the outcomes of 59 schools in Illinois in the US, all of which had managed to sustain high levels of performance for three consecutive years. Trimble (2002) examined five high functioning, high poverty middle schools from Georgia. Both these studies focussed on the use of data (knowing what a student already knows and using this to inform instruction) and reported that use of data featured as a key characteristic of those high performing schools. These findings suggest that establishing what students already know, rather than assuming that students know little due to a lack of resources, is critical for achieving high academic outcomes in high poverty schools.

Jesse, Davis, and Pokorny (2004), and Jamar and Pitts (2005) both examined the practices of teachers with students of ethnic background and found that teacher expectations play a critical role in academic outcomes. This is not a new finding. In 1968, Rosenthal and Jacobson conducted an experiment with students from a low socio-economic school. The teachers in their research were informed that a select group of students were soon expected to “bloom” academically, when in truth they were a random selection of students (Henrikson, 1971). The findings showed that the students who were expected to “bloom” showed greater academic growth one year later, when compared to their peers (Henrikson, 1971). This led the researchers to conclude that teacher expectations can influence student achievement.

Research into high-performing schools has identified some of the characteristics that set them apart from schools with low academic performance and highlights that the informed use of data and high teacher expectations appear to be aspects of effective teacher practices. It is through identifiable and tangible common practices such as these that researchers have attempted to support the notion that high performance can be attributed to more than chance, or a privileged background, and that high performance can be directly attributed to what schools and their teachers do.

Effective Teacher Practice: Use of Feedback

The list of teacher practices found to be effective is a lengthy one. For example, Jesse et al. (2004) listed 57 characteristics of effective practice following their literature review of studies that found that connections between the school and the community are important to the success of low-income students; Louden et al. (2005) listed 33 which they divided into six categories, those of participation, knowledge, orchestration, support, differentiation, and respect; Danielson (2007) lists 76 within her *Framework for Teaching* and Hattie (2009) listed over 130.

In contrast to studies that merely list characteristics of effective practice, Hattie (2009) specifically measured the effect size of various influences on student achievement. Results from Hattie’s study showed that 90 percent of the 130 characteristics that he listed have a positive effect size, suggesting that “virtually everything works” (Hattie, 2009, p. 16). This perspective on teacher influence would suggest that rather than identifying what it is that effective teachers do, it may be of more benefit to explore which practices have been found to be the most effective.

Kane, Taylor, Tyler, and Wooten (2011) found that students who made greater academic growth were taught by teachers who made use of the practices listed in the US’s *Teacher Evaluation System* (TES). The use of “timely, constructive feedback” was one of the practices used by the teachers who took part in their study (Kane et al., 2011, p. 593). Interestingly, rather than simply listing “feedback” as a characteristic of effective practice,

Kane et al. (2011) felt the need to clarify that it was feedback that was “timely” and “constructive” that merited its inclusion within their listing.

Stronge, Ward, and Grant (2011) researched 307 fifth grade teachers in the US to compare the practices of less effective teachers with those who worked with students who achieved high academic outcomes. They found that a greater percentage of more effective teachers gave and received “quality feedback” than less effective teachers (Stronge et al., 2011). As with Kane et al. (2011), Stronge et al. (2011) clarified their definition of “feedback” by stipulating that feedback needed to be “meaningful” to qualify for inclusion in their listing. The Organisation for Economic Co-operation and Development (OECD) reinforced this need to place parameters around the type of feedback given, stating that “the most effective feedback is timely, specific and tied to explicit criteria” (OECD, 2005, p. 3). This suggests that not all forms of feedback are effective.

Intrigued by the findings of Meiers et al. (2000)’s Longitudinal Literacy and Numeracy Study, Loudon et al. (2005) (with Meiers acting as a contributing author) conducted a study that investigated the practices of the more effective teachers. Researchers found that though feedback featured in most teachers’ classrooms, the “more effective” and “effective” teachers “provided children with feedback that explicitly indicated exactly what was being celebrated, modified or corrected” (Louden et al., 2005, p. 131). Though the less effective teachers also gave feedback, this feedback was often related to a student’s efforts, giving comments such as “beautiful” or “well done” with no specific indication of the elements of the student’s work that was being commented on (Louden et al., 2005, p. 132). It was the “explicitness” of feedback that distinguished the more effective teachers from the less effective (Louden et al., 2005).

Measuring effect size is viewed by some researchers and educators as an objective and reliable means of assessing effectiveness because sample groups can be likened using a comparable scale. In addition, researchers can move away from simply assessing whether an approach is effective, to quantifying the extent to which that approach influences student outcomes (Coe, 2002). In his meta-analysis, Walberg (1984) found that “cues and feedback” had an effect size of 0.97 (p.25). What was most noteworthy was that “assigned homework” yielded an effect size of 0.28, whereas “graded homework” yielded 0.79 (Walberg, 1984, p. 25). This seems to suggest that the provision of feedback can have a significant impact on student achievement outcomes.

Kluger and DeNisi (1996) conducted a meta-analysis of studies related to student outcomes a decade later and found that feedback had an average effect size of $d=0.41$. They elaborated on this to report that as feedback became more focused on the task, the effect size increased to measures greater than $d=0.41$, but as feedback became more about the self and less about the task, the effect size decreased (Kluger & DeNisi, 1996). In his own meta-analysis of over 800,000 meta-analyses on student achievement, Hattie (2009) found that feedback, with an overall effect size of $d=0.73$, was listed within the top ten characteristics of effective practice. Similarly, he found that not all forms of feedback are as effective as each other, reporting that feedback that is “received and acted upon by students,” and feedback that is “a ‘consequence’ of performance” was the most effective at influencing student outcomes (Hattie, 2009, p. 174). This appears to have been supported and reinforced by Boud and Molloy (2013) who suggest that the term and use of ‘feedback’ may have been misinterpreted in educational settings. The authors extrapolate their reasoning by comparing the often used definition of feedback as “transmission of information” to the use of feedback in engineering and biology where “for feedback (or homeostasis) to be said to occur there must be some identifiable influence on the system that is the recipient of the feedback” (Boud & Molloy, 2013, p. 698).

Considered in this light, there appears to be a complex series of interrelated phases that are evident during the feedback process. For example, when a teacher “gives feedback”, what in fact may be occurring is that the teacher is making use of information (student data) to influence their own actions. The teacher synthesises this information and shares it with the student. At this stage, the information that was used has had an effect on the teacher, informing how they intend to support the next phase of the child’s learning. The teacher now understands the child a little better and is modifying teaching practice; tasks s/he chooses to plan for, teaching approaches s/he chooses to use, the understandings s/he has chosen to share, and so forth. When a teacher shares their understandings with the student, when they think that they are “giving feedback”, they in fact may be demonstrating that they themselves have been the recipients of feedback. The teacher is the active agent and the student is the subject of inquiry. At this point in time, feedback has not been received by the student. To be confident that the child has been placed in the role of recipient, the student needs to demonstrate that they have acted in response to the teacher’s use of feedback and modified practice. Figure 1 brings together all of these phases, in an attempt to illustrate the process that needs to occur in order for both teacher and student to be said to be users of feedback:

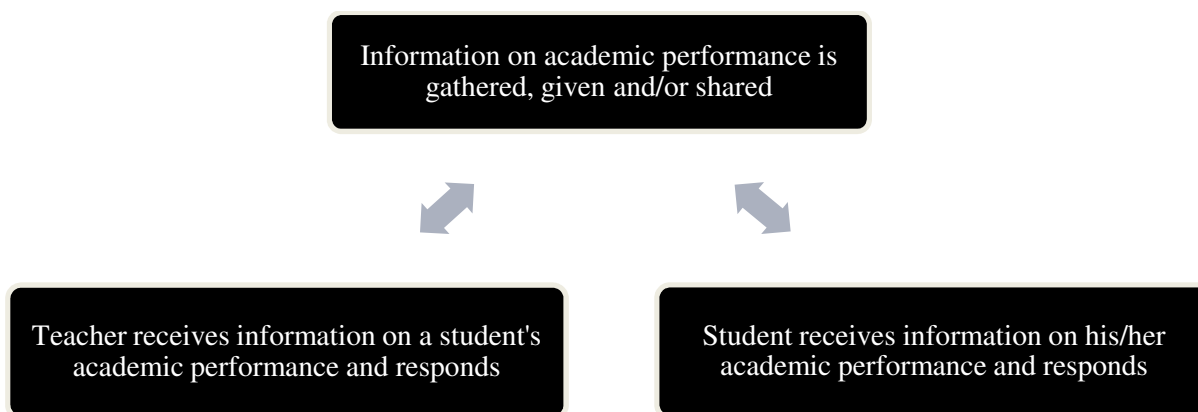


Figure 1: The Feedback Process

Literacy and Timing

As mentioned in the introduction, this study recognised that it may not be enough to simply ensure that students are the recipients of feedback. Feedback may also need to be timely to ensure that it can be received by its intended audience, and to ensure that steady progress can be made in literacy development. In her longitudinal study on the reading skills of 54 students as they moved from first to fourth grade for example, Juel (1988) found that the students who were poor readers in year one had an approximately 88 percent chance of remaining poor readers over the following three years. This type of research was supported by a large-scale literature review conducted by the National Reading Panel (2000), who reported that evidence seems to suggest that poor readers will remain poor readers as they progress through school.

Stanovich (1986) attributes this to the suggestion that certain skills need to be acquired early to circumvent a “causal chain of escalating negative side effects” (p.364). In his report, Stanovich (1986) posits that phonological awareness is developmental, that it assists with initial reading acquisition, but is not relied upon as heavily as readers move towards accessing their developing vocabulary knowledge. He suggests that if the acquisition of phonological awareness is delayed, so is fluency and with it comprehension and

vocabulary acquisition, which can lead to the “Matthew Effect”; poorer readers fall further behind their peers as the more proficient readers continue to progress (Stanovich, 1986, p.389). Hattie (2009, p. 133) also found that phonemic instruction had a greater effect for pre-schoolers than for higher grade levels, with effects decreasing as student age increased. These findings suggest that more than adopting certain practices, applying effective practices in the early years may have a greater impact, especially where the development of particular reading related skills are concerned. It is for this reason that this study was designed to focus on students in their first year of schooling, with phonemic awareness skills the specific performance outcome under examination.

Phonemic Awareness

Oxford University Press (2012) defines literacy as “the ability to read and write”, while the International Adult Literacy Survey reports that literacy is,

“a particular capacity and mode of behaviour: the ability to understand and employ printed information in daily activities, at home, at work and in the community – to achieve one’s goals, and to develop one’s knowledge and potential.”

("A literate Australia: national position paper on the future adult literacy and numeracy needs of Australia," 2001)

The ability to hear, isolate and manipulate individual units of sound are the skills of phonemic awareness, a subset of the skills of phonological awareness, which includes the ability to work with syllables, onset and rime, and rhyme (Associates, 2004; Lerkkanen, Rasku-Puttonen, Aunola, & Nurmi, 2004; Snider, 1997). The skills of phonemic awareness are firmly linked with the ability to engage with printed text, as letters, which are more specifically referred to as “graphemes”, are the written representations of those units of sound.

Phonemic instruction, which focuses on the units of sound that graphemes represent, informs the teaching of orthography. The English language is quite complex, being referred to as a language with a “deep” orthography as opposed to languages such as Finnish where the grapheme-phoneme link is more direct (Gontijo, Gontijo, & Shillcock, 2003). The grapheme 'a' for example, can represent a variety of phonemes in the English language as reflected in the words: *angel*, *apple*, *water*, *was* and *zebra*. Other units of sound can be represented by groups of graphemes e.g. /I/ can be represented by ‘eigh’ in *height*, ‘igh’ in *high*, or ‘ie’ in *pie*. The complexity of the English language was reported in a study by Gontijo and colleagues (2003) . They investigated the grapheme-to-phoneme correspondence of 17.9 million words in British English and reported 461 ways in which to use the 26 letters of the English alphabet to represent the sounds used in those words.

The importance of the explicit teaching of the alphabet and letter-sound relationships in the Junior years of schooling is well documented (Australian Government: Department of Education, 2005; National Reading Panel, 2000). This skill has come to be accepted as a key component of the skill of reading, as decades of research has pointed to a causal link between phonological awareness and reading success (Furnes & Samuelsson, 2009; Kozminsky & Kozminsky, 1995; National Reading Panel, 2000; K. Stanovich, 1986; K. E. Stanovich, Cunningham, & Cramer, 1984).

Conferencing

One of the main challenges for teachers regarding the incorporation of feedback into their teaching of phonemic awareness is determining the type of feedback that would lead to positive outcomes. Given the findings from Loudon et al. (2005) and Hattie (2009) it is evident that not all forms of feedback lead to high levels of achievement, or if we were to take on the interpretation given by Boud and Molloy (2013), that not all information given by teachers to their students result in the effective reception of “feedback”. This suggests that further research is warranted that investigates the best way in which to engage with students to facilitate the giving and receiving of feedback.

The effectiveness of teaching methods used when communicating with students has been a topic of interest for many decades. One of the earliest studies, the ORACLE project (Observational Research and Classroom Learning Evaluation) conducted from 1976-1978 in 58 classrooms in the UK found that with an average of 35 students in a classroom, teachers spent under 5 seconds with children in 40% of one-to-one exchanges (Galton, Hargreaves, Comber, Wall, & Pell, 1999, p. 23). Twenty years later, Galton et al. (1999) replicated the ORACLE Project with 28 teachers to find that though there was a slight increase in the time spent on whole class teacher-pupil interactions (an increase of 16%), there was also an increase in time spent with small groups (7%) and less time spent with individual students (a decrease of 23.2%). An analysis of the dialogue evidenced in these classrooms found that the shift had resulted in an increased amount of time spent talking “at” students and not “with” students.

Whole class discourse often discounts or ignores the diversity in life experiences, knowledge and perspectives that students bring with them to school beyond an initial brainstorm that might accompany the introduction of a new topic (Wells, 2009). This mode of delivery of discourse does not allow every student to engage in questioning that might be unique to their own schema and does not allow for the teaching and learning of a variety of content. This mode of delivery often favours the delivery and learning of the “same prescribed material” (Wells, 2009, p. 267).

Another possibility is revealed when considering that discourse, described as “language in time” (Nystrand, Wu, Gamoran, Zeiser, & Long, 2003, p. 136) is constructed and structured by the participants as they consider and factor in the intentions of the other conversant (Nystrand et al., 2003) interpreting, understanding and using language within the context of their exchanges. When delivered as written print, or when explained to a group of individuals as a whole, it is difficult for a teacher to determine whether the message was understood as it was intended. When dialogue is monologic the student does not have the opportunity to engage in the construction or structure of language so that they can interpret, understand and use the information that they have received. This difference in function can be explained by considering that monologic discourse is used to transmit information, whereas dialogic discourse can be used as “thinking devices” (Nystrand et al., 2003; Wells, 2009).

Even when classroom discourse is dialogic, it has often been found to rarely engage students in cognitively challenging exchanges, with the few students who do participate most often responding with a reiteration of the teacher’s previous statement/s, or stating what is already known (Galton et al., 1999; Gillies & Khan, 2008; Nystrand et al., 2003). When talk is monologic, the speaker is authoritative (Wells, 2009). That is not to say that all classroom dialogue is ineffective and that there is not a time and place for such discourse. Engaging students in an interactive exchange of dialogue with teacher, peers or a mixture of both, have been found to be highly effective in assisting students to work within their “intermental development zone” (Mercer, 2000, p. 140), to engage in “inter-thinking”(Wells, 2009) and to

develop the ability to engage in “intramental” activity as they reflect, analyse, reason and synthesis independently. When linked to communication of individualised, specific, feedback however, where the discussion requires a more structured and focused route, it is possible that one way to achieve a communication of minds is through a one-to-one conference. This should all be considered within the context of a well-balanced interplay of whole class, group and individual dialogic exchanges.

Student/teacher conferences provide opportunities for open dialogue whereby students are provided with opportunities to arrive at an understanding, to receive and to respond to the information that the teacher is feeding back. It also allows the teacher to monitor the student’s understanding and evaluate student responses and modify and expand on the information that is given until they feel assured that their intended message has been received. A mutual exchange of dialogue provides a window into the thoughts and message of the other and demonstrates that feedback has been received by both parties. This appreciation for the suggestion that understandings are not a solitary endeavour has been supported by theorists such as Chomsky (1975) and Rogoff (1990) who proposed that “ understanding happens between people; it cannot be attributed to one person or the other in communication” (Rogoff, 1990, p. 67).

Student/teacher conferences may be an effective avenue through which to ensure that explicit feedback is received by both parties because it allows the teacher to understand what influences the student’s thoughts, the level of their understanding and any additional support that might need to be supplied. In addition, it may also help students to understand how they can use the information they’ve been provided with to support their learning by highlighting the need for, and allowing time to qualify or modify talk.

Aims of the Study

This study had two main aims.

1. To investigate the impact of additional, individualised conferencing sessions within an existing literacy program on the development of literacy skills in a group of children in their first year of schooling in a primary school within a regional area of Victoria, Australia. Specifically, the literacy skills measured throughout this study were students’ knowledge of letter-sounds and letter- identification.
2. To investigate the impact of providing timely and explicit feedback during individual conferences on all students’ knowledge of letter-sounds and letter-identification, and whether such an approach would privilege students who were more academically advanced upon school entry.

Method

Participants

84 children and one class teacher participated in this study. The 84 children (n=49 males; n=35 females) in this 11-month study were in their first year of primary schooling in a Victorian Government school (grade Prep), in Australia. Upon school entry, these children ranged in age from 4 to 6 years. At the time of this study, the school had a student enrolment of 524 students (n=258 males; n=266 females), with the majority of parents being tradesmen or women, skilled office staff, sales staff or service staff (DEECD, 2012). Four percent of students from Prep to Grade 6 were recorded as having Language Backgrounds Other Than

English (LBOTE). These languages included Afrikaans, Filipino, Hungarian, Italian and Croatian, with the majority being Vietnamese and Tagalog.

The 84 child participants were grouped according to the Prep classes they were enrolled in. For the purpose of this study, these participant groups were called Group A (n=16), Group B (n=16), Group C (n=17), Group D (n=17) and Group E (n=18). Individual details for child participants were only available for Group A whereby permission was sought from parents to consent to their children participating in this study. Group A received the additional individualised one-to-one conferencing sessions with their classroom teacher. During these conferences, the teacher provided students with explicit and timely feedback regarding their letter-sound and letter-identification knowledge. The remaining four groups participated in their regular language and literacy sessions. Group A consisted of 9 males and 7 females and were all taught by the class teacher participant. No child in this group came from a Language Background Other Than English (LBOTE). One child was autistic and one presented with an oral language disorder. Data for Groups B to E were only available in aggregate form where no participant was identifiable. Permission was sought from the school principal and the Victorian Department of Education and Early Childhood Development (DEECD) to use these results.

The class teacher participant, Mandy, had over ten years of teaching experience at the time of this study. She had spent five years teaching children at the Prep level and five years teaching Grades 1 and 2. Mandy was a passionate language and literacy teacher and continually reflected on her own teaching and pedagogy with the aim of improving student outcomes in this area.

Phonemic Awareness Assessment

For the purpose of this study, two aspects of phonemic awareness were addressed and assessed throughout the one-to-one conferences: (1) letter-identification, and (2) the most common letter-sound correspondence. These areas of phonemic awareness were chosen as the focus for the one-to-one conferences based on the Prep results from the year prior to this study. It was noted at the end of that year that only 54 percent of these Prep children were able to name all upper and lowercase letters of the alphabet and to identify the most common sound for each. These results were of interest given the body of research that suggests that phonemic awareness is most effective when there is an understanding of the direct grapheme-phoneme link (Lerkkanen et al., 2004), and that this grapheme-phoneme link has been found to be instrumental to reading success (Reading & VanDeuren, 2007). Mandy chose to focus her attentions on these areas of phonemic awareness with the new group of Prep children in her class because she suspected that a past focus on one letter a week may not have been sufficient to ensure that most students understood the grapheme-phoneme link by the end of their first year of school, and that a change in approach was needed.

All children across the five Prep groups were assessed individually upon school entry and at the end of each of the four school terms (April, June, September and December) by their classroom teachers. Each child was presented with a sheet of the 26, randomly placed letters of the English alphabet. This sheet listed each of the letters in both their uppercase and lowercase forms. As part of this assessment, children were asked to name each of those 52 letters and to give the most common sound for each. Children were awarded one mark for each correct name and each correct sound given (the most common sound for each letter; the only exception being the letter 'Y' where the accepted sound was /y/ as in 'yellow' rather than its most common sound, /i / as in 'mysterious' (Gontijo et al., 2003)). Results were totalled and each child was awarded a score out of 104. This assessment was available

through the Department of Education and Early Childhood's *English Online Interview* site (DEECD, 2009).

Teacher/Student Conferencing: Existing Practice

At the time of this study, the most typical literacy teaching approach implemented by classroom teachers in the State of Victoria for children in the early years of schooling (grade Prep to Year 2) was the "two-hour literacy block" (Hill, 2012). These two hours are usually broken into one of reading and one hour of writing. During the reading block, the Prep teachers in the current study, with the exception of Mandy, followed the structure of this teaching approach. Teachers modelled or shared reading with the whole class for 10-15 minutes each day. After whole group sessions children were divided into like-needs groups. Children engaged in independent reading tasks in their small groups or independently while the teacher worked on the specific needs of one small group at a time. The teacher focus group participated in Guided Reading sessions (Hill, 2012) whereby teachers were able to listen to individual children read. At the end of each small group session, children came together as a whole group and shared their reflections on their learning. A focus on phonemic awareness was incorporated throughout these sessions although the main focus for letter-identification and letter-sound involved "teaching" one letter and its most common corresponding sound each week.

The only designated time set aside for teacher/student conferencing was during Guided Reading sessions. This daily 10 to 15 minute session enabled teachers to provide children with individualised feedback on their learning. However, given that these small groups consisted of five to six children, it was often not possible to set up a one-to-one conference with all children. Typically, teachers provided specific feedback twice a week with each child during the Guided Reading session. At the end of each term teachers officially tested their students on their phonemic awareness using an alphabet sheet developed for, and available through the *English Online Interview* site (DEECD, 2009). It was not mandated that teachers share outcomes with children. Written reports were provided to parents every June and December, detailing the progress that their children had made and future areas for improvement.

Teacher/Student Conferencing: Group A

At the commencement of this study, Mandy made some changes to the existing Prep reading program to include additional time for teacher-student conferences for all children in her class. The additional conference was introduced as it appeared to be the most appropriate avenue through which to provide children with timely, specific, and individualised feedback. Within Group A's reading program, children took part in the traditional reading model outlined under "existing practice" up above, for the first hour of the Reading block. This was followed by an additional hour for Reading four times a week. This second hour provided students with more independent task time, while conferences with individual children took place.

During each 10-minute conference, each child was asked to name the letter and its corresponding sound. Mandy took a record of the letters the child knew in full (naming both upper and lower case letters and identifying the most common sound for each). These results were shown to the child and together the child and teacher compared those outcomes with what had been recorded in previous conferences. Mandy and the child discussed the letters

the child knew, which letters they found difficult to name, and their corresponding sounds. Together, Mandy and the child would consider why certain letters and sounds may have been difficult for the child to remember and/or would suggest strategies for supporting their learning. They would also negotiate which unknown or partially known letter should become the child's next letter of focus, whether more time should be spent on the current focus letter or whether it would be prudent to return to a previous letter focus that appeared to have been forgotten in the interim. At times, when children were reticent to choose a letter to focus on next, Mandy supported the child to choose a letter. This was often based on the unknown letters that appeared in one of the child's six focus "Sight Words". These sight words were taken from the Oxford Wordlist (Oxford University Press, 2008) which lists words in order of frequency of use. All five of the Prep grade teachers were testing students on their sight word knowledge and sending home a list of six unknown words using the Oxford Wordlist for consistency of approach. Whether students were tested weekly, fortnightly or monthly was up to teacher discretion. Once a focus letter had been chosen, Mandy then listened to the child read an instructional text for a few minutes, engaging the child in dialogue that was related to the reading task as a whole. Mandy would also call attention to the focus letter throughout the child's reading of the text when appropriate in an attempt to highlight the link between the unknown letter and the sound it makes in words in context.

A copy of the alphabet recording sheet and the new learning goal was provided for the parents from Mandy's class (see Figure 2) and the new letter focus was recorded and displayed on the student's table. Not all children had the same letter focus on any given day or week. While conferences were taking place, the other students were engaged in independent tasks, as was the case when the traditional reading model was followed. Writing was taught for an hour each day, at a separate time. On average, this meant that 3 to 4 children were conferenced each day, allowing each child to receive explicit and timely feedback on their letter knowledge outcomes on a fortnightly basis, in addition to the specific feedback they received on their in-text reading performance during small group Guided Reading sessions twice a week.

The letters that are crossed out are the letter sounds that I know. The highlighted letter (or letters) is the letter that I am trying to learn now...						
Aa	Bb	Cc	Dd	Ee	Ff	Gg
Hh	Ii	Jj	Kk	Ll	Mm	Nn
Oo	Pp	Qq	Rr	Ss	Tt	Uu
Vv	Ww	Xx	Yy	Zz		
I am learning the letter name e.g. "This is the letter 'A'" and... the sound that it makes eg. "It makes the /a/ sound - like the /a/ in 'apple'"						

Figure 2: Recording Sheet Used to Record Children's Letter-Identification and Letter-Sound Knowledge, and to Identify New Learning Focus

Results

Children in all five Prep groups were assessed on letter-identification and letter-sound knowledge for the 26 letters of the English alphabet, as both upper and lower case letters, at the commencement of the year and at the end of each of the four school terms (February, April, June, September and December). For the purpose of this study, children's letter

knowledge was scored correct if they identified both the letter sound and letter name. This is referred to here as an “association”. Each child received an overall letter knowledge score out of a possible 104 (total of 52 for letter-identification and a total of 52 for letter-sound). Results for each of the five Prep groups were collated and compared across the groups. Group A participants’ individual results were based on children’s letter-identification and letter-sound knowledge throughout the year as well as the date that each child received a score of 100%.

Group Results

Figure 3 shows school entry letter knowledge results for all five Prep groups. Groups were allocated according to each classroom teacher and their class of Prep children (Group A, Group B, Group C, Group D and Group E). Group scores have been further divided into quartiles. The first quartile (25% of the children in the grade) represents the lowest performing children in each group. This can be seen as a thin line (or a whisker) running vertically out of the bottom of the bar. Results show that in Group C’s results for example the lowest performing child or children scored 6 and the highest performing child or children in that first quartile scored 28. The remaining children in that first quartile received a score somewhere between 6 and 28. The fourth quartile (25% of the children in the Grade) represents the topmost performing children in each group. This can be seen as a whisker running vertically out of the top of the bar. The black box represents the second quartile (25% of students) and the grey box represents the third quartile (25% of students), showing how the remaining 50% performed.

Results from Figure 3 show that all children from each Group began school with a great variance in their phonemic awareness skills. Groups B and D had a child or children who knew all letter names or sounds with only one letter name or sound preventing them from receiving a full

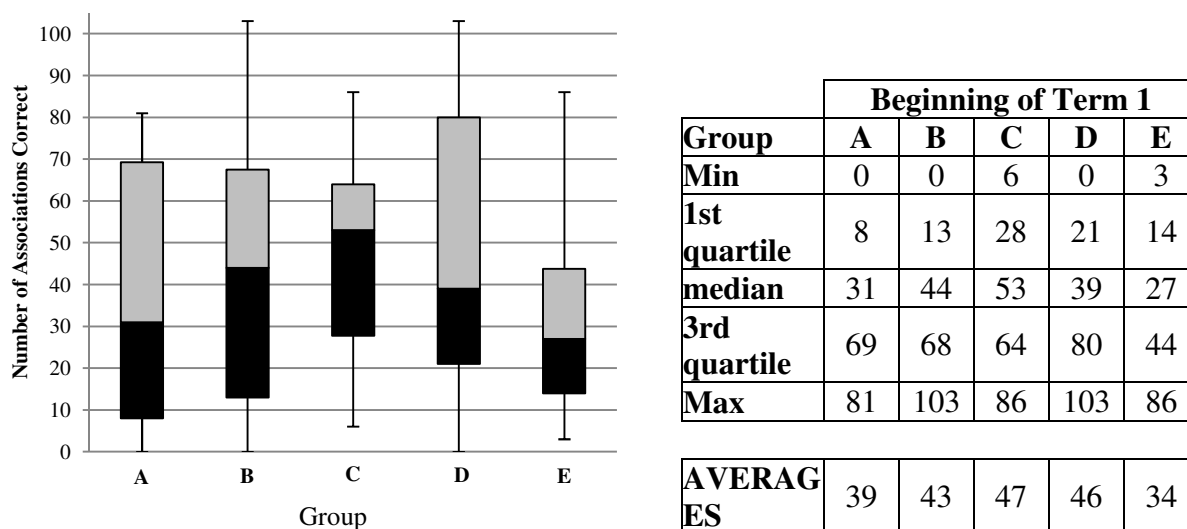


Figure 3: School Entry Letter Identification Results for each of the Five Prep Groups

score, upon school entry. In contrast, Groups A, B and D had a child or children who did not know one letter name or sound. Although Group C’s highest performing child or children did not score as highly as the highest performers of Groups B, D or E, Group C’s overall average was the highest of all five groups. Interestingly, the highest performing children from Group

C only made 86 associations upon school entry and the lowest performing student or students knew six associations.

Group E was the lowest performing group overall upon school entry. Although there were no children who scored less than 3, 75% of children in this group (students from the first, second and third quartiles) achieved a score of no more than 44 associations upon school entry.

Group A's students (the group that received the additional conferencing time with their teacher) achieved an average score of 39: 5 associations greater than the lowest performing grade (Group E). Group A also had the fourth highest average score upon school entry. The lowest performing children from Group A (those within the first quartile) were the poorest performing of all five groups, with all children in this group scoring between 0 and 8. The highest performing children in this group were the poorest performing across all five groups, knowing no more than 81 associations upon school entry.

Figure 4 shows letter knowledge results for each of the five Prep groups at the end of each of the four school terms. A correct score was calculated on the child's knowledge of both letter-identification and letter-sound for each of the 26 letters of the English alphabet as represented by both upper and lower case letters (total score of 104). Results show that most children from all five groups made steady progress from term to term with one or more children in the first quartile of Group B acting as outliers and not scoring more than 0 until the End of Term 3.

Inspection of the End of Term 1 results show that Group A had progressed from fourth place from the commencement of the term to achieving the highest average letter knowledge score across all five grades. In addition, Group A had the highest performing third and fourth quartile students at this stage. The fourth quartile students all received a score between 103 and 104 and the third quartile students achieved scores between 90 and 103. The lowest performing child or children were also the highest performing in this quartile across all five groups, receiving a score of 22.

By the end of Term 3, Group A was the first grade to have all children achieving a score of 104. Group B and Group C had children in quartiles one and two (50% of students) who had not achieved a score of 104 and Group E had students from quartiles one, two and three (75%

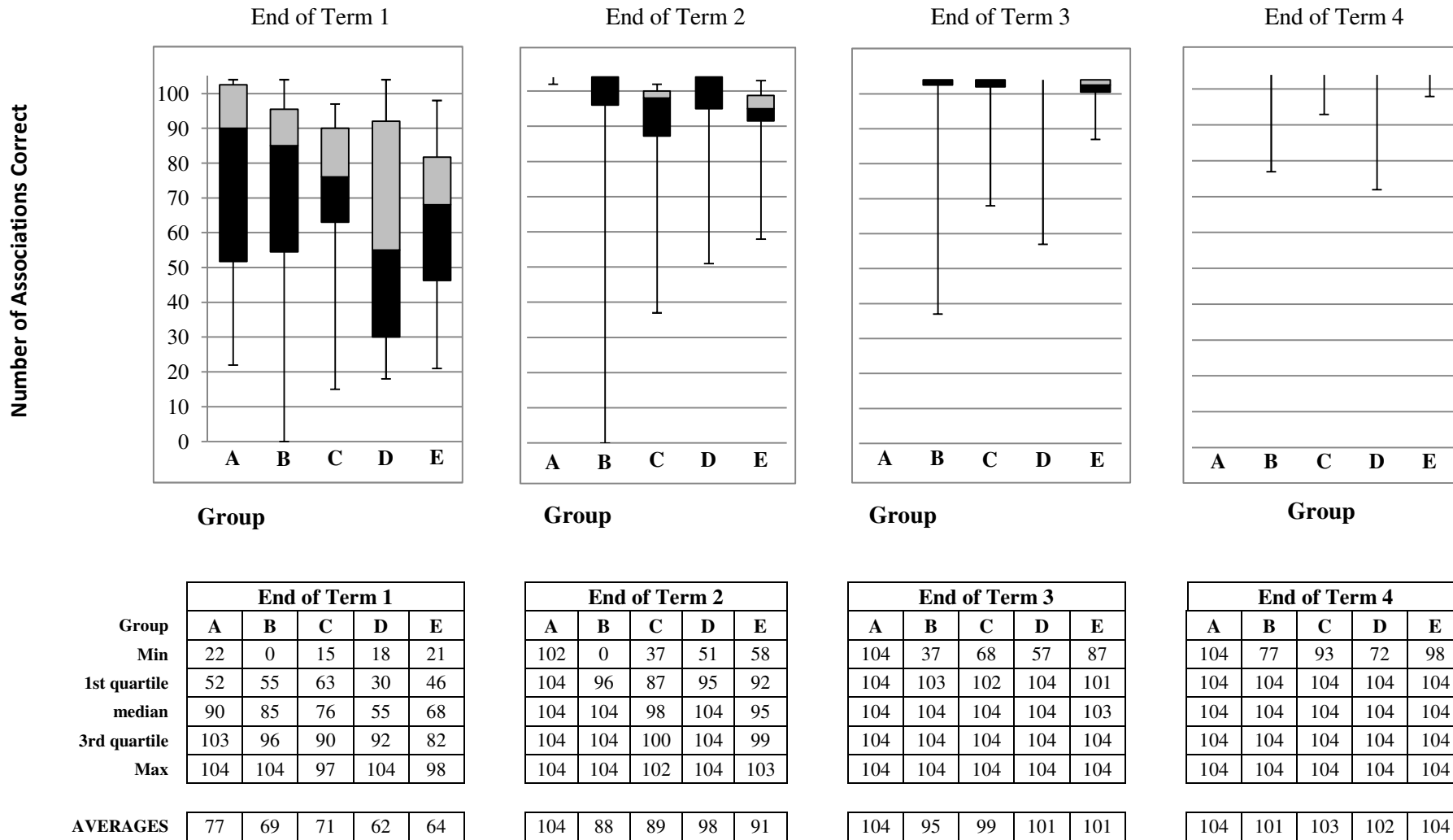


Figure 4: Letter Knowledge Results for each of the 5 Prep Groups at the End of each of the Four School Terms

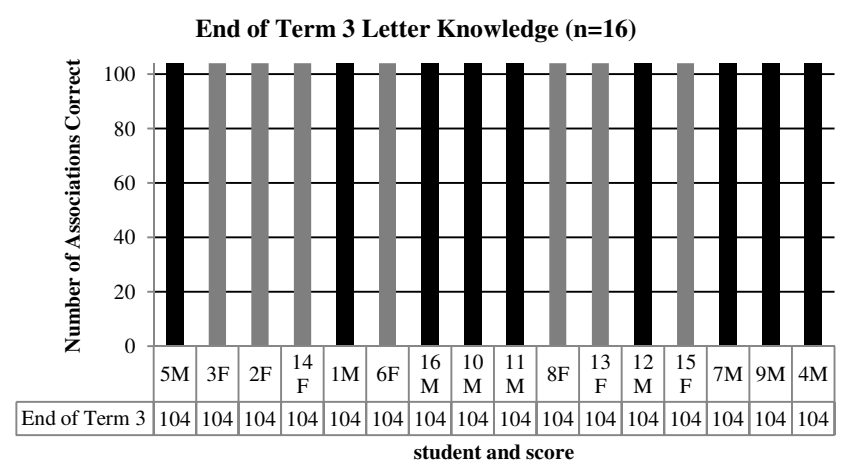
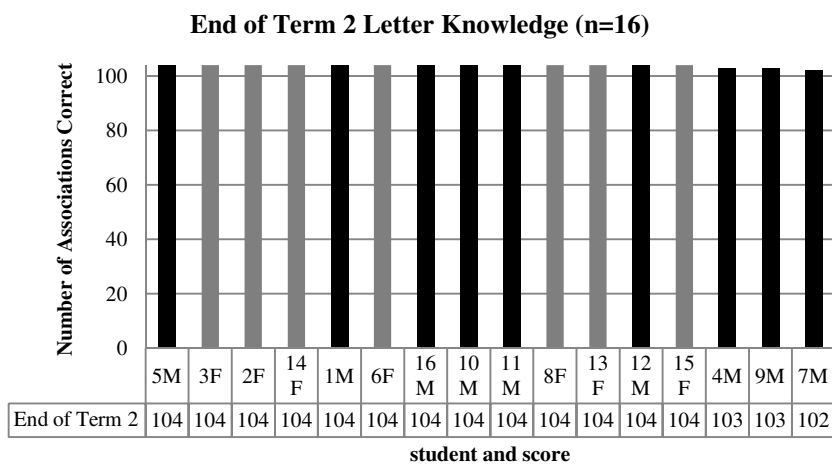
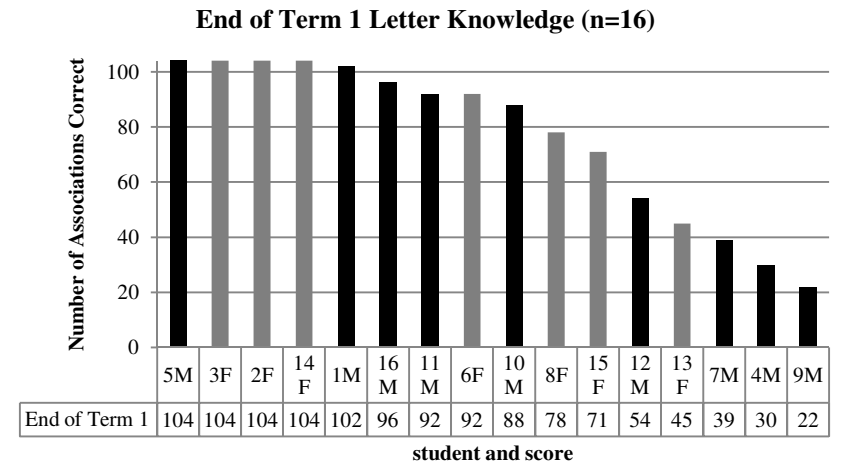
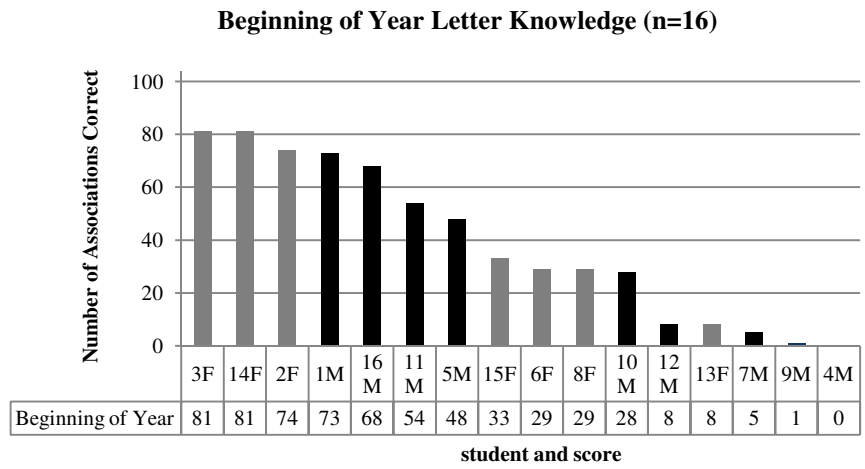


Figure 5: Group A: Letter Knowledge Results by Term: Terms 1-3

of students) who had not achieved a score of 104.

Further inspection of the end of Term 4 results show that Group A was the only grade to have every student score 104. 75% of students (students from the second, third and fourth quartiles) or more from Groups B, C, D and E learned all their letter names and sounds by the end of the year. 90% of all Prep students obtained a score of 104 by the end of the year.

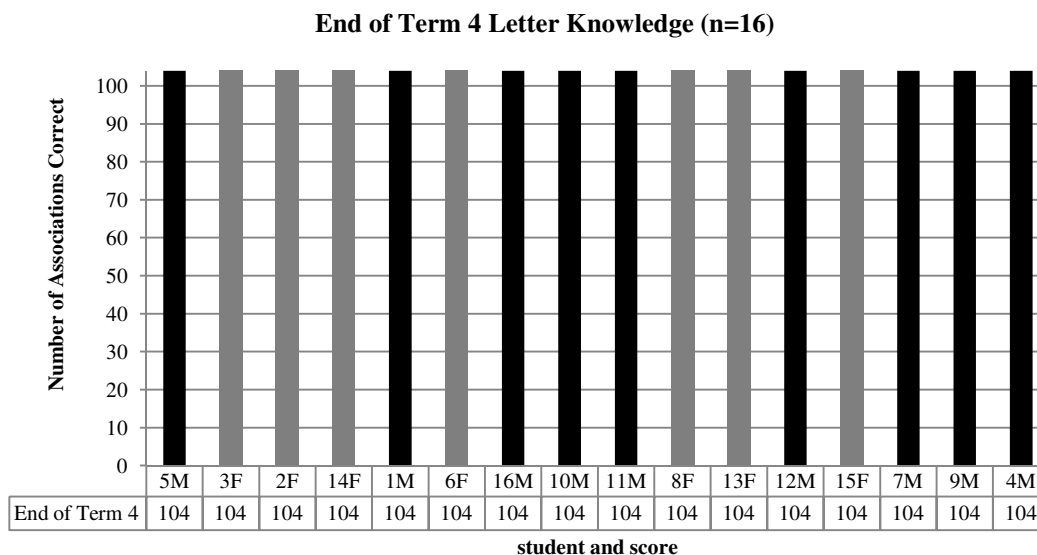


Figure 6: Group A: Letter Knowledge Results: End of year

Individual results

Individual letter knowledge results for Group A students are presented in Figures 5 and 6. These results present student scores at the commencement of the Prep year and at the end of each of the first three school terms. Results show that at the commencement of the Prep school year 15 of the 16 children had some letter knowledge with scores ranging from 81 to 1 correct ($M = 38.75$). Further inspection of the data shows that the female children in Group A received an average score of 47.86 while male children received an average score of 31.67 correct. By the end of Term 1 (April), all children in Group A had some letter knowledge with four of the 16 (25%) children scoring 100% ($M=76.56$). On average, females scored higher than males with average scores of 85.43 and 69.67 respectively. At the end of Term 2 all children continued to progress with 13 of the 16 (81%) children scoring 100% on the test. The three male children who did not score 100% scored highly with two children making only one error while the third made two errors. Results from the end of Term 3 showed that all children in Group A scored 100% on the assessment. These children maintained their knowledge of letter identification and letter sounds throughout the final term of the Prep year with all children maintaining the score of 100% correct at the end of Term 4.

Figure 7 shows the date when each child in Group A achieved a score of 100% correct with their letter knowledge (i.e. letter-identification and letter sound). Results show that all children had attained full scores of 104 by the 4th of August, two weeks into Term 3. Interestingly, as children scored 100% on this assessment, they continued to show their understandings and knowledge of letter-identification and letter-sound for all 26 upper and lower case letters of the English alphabet. This continued knowledge was evident by the maintenance of total correct scores throughout the year as measured at the end of each term (see Figures 5 and 6).

Group A 100% Letter Knowledge Acquisition Date

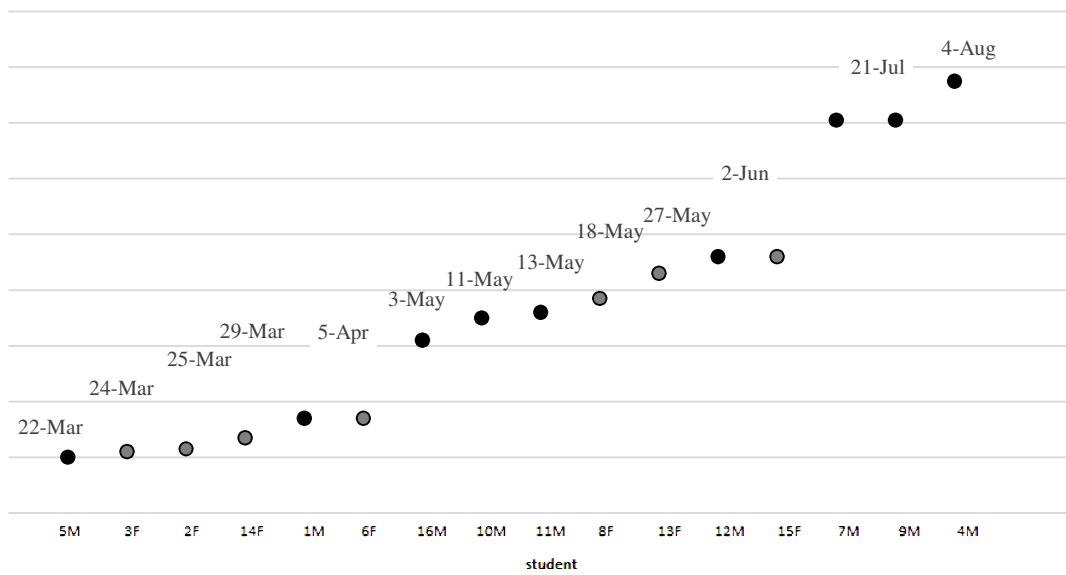


Figure 7: Group A Letter Knowledge Acquisition – Timing

Discussion

Aarnoutse, Leeuwe, and Verhoeven (2005, p. 255) suggest that letter recognition and phonemic awareness are a fundamental precursor to word recognition and in turn to reading comprehension, as:

“Word recognition implies, among other things, that children understand the principle of the alphabet or, in other words, see that the sounds of a spoken word correspond to the letters of a written word. Every letter of the alphabet represents, in principle, a speech sound with a meaningful distinction. Word recognition implies at the level of early literacy that children can transpose the letters of a word into sounds (the grapheme-phoneme association), connect the sounds to a spoken word, and assign a meaning to this word...”

In addition, research has found that letter recognition and phonemic awareness needs to be acquired in the early years in order to facilitate the most successful development of reading (National Reading Panel, 2000; K. Stanovich, 1986).

Studies that have looked into effective teacher practice have found that the use of timely, specific, individualised feedback is a key characteristic that distinguishes the more effective teachers from those who are less effective (Kane et al., 2011; Louden et al., 2005; Stronge et al., 2011), with Boud and Molloy (2013) and Hattie (2009) extrapolating and emphasising that it is only when information is “received and acted upon” that feedback can be said to have occurred.

In light of these findings in the literature, this study investigated the use of feedback, based upon student performance, on children’s letter recognition and letter sound correspondence. Furthermore, this study sought to investigate how this feedback might successfully be incorporated into a first year reading program during student teacher conferences in order to help facilitate such an acquisition.

The Importance of Explicit and Individualised Feedback on Letter Sound and Letter Knowledge

Results from this study suggest that feedback on academic performance needs to be individualised, timely and explicit for every child from the first day of primary schooling, particularly given that students enter school with a great variance in skill. The results presented here illustrate that across the five groups student knowledge ranged from not knowing any letter sounds or names, to students who had only one or two letter names and/or sounds left to learn.

It appears from the findings from this study, as shown in Figure 5, that existing teaching practice of teaching a letter a week would not have met the needs of every child in each of these groups, as there were students who already knew most letter names and sounds. In addition, teaching a letter a week would not have met the needs of those children who knew very few letters, as there would have been no provision to revisit letters if those letter-sound and/or letter-name associations had not been learned in their allocated week.

Figure 7 shows that with the provision of individualised feedback, free from a focus on the same letter for every child in the same given week, there were a few students in Group A who learned all letter names and sounds in their first term of school, with most students learning all letter sounds and names by mid-year. In Group A, all students learned all letter names and their most common sound by week 2 of Term 3.

The speed at which Group A students learned letter sounds and names compared to the other grades suggests that students may have made use of the individualised and explicit feedback given during conferences (along with Guided Reading, possible home support and engagement in tasks). A follow-up interview with Mandy supports this suggestion with Mandy stating that she often engaged her students in conversations to ensure that they used the individualised letter focus cards on the children's tables throughout her daily teaching, whenever the need arose in context when the children were working independently. She also mentioned that many students would often declare "That's my letter," or "That's your letter," when participating in whole group reading or writing tasks, illustrating that they were themselves aware of their focus letter; with some students aware of the letter focus of their fellow classmates as well.

Though it cannot be known if there were any students with diverse needs in the other four groups given the unidentifiable way in which the data was collected, it is known that Group A had a student with autism and another with verbal dyspraxia. In light of this, it was of note to see that in spite of these diverse needs, Group A was the only group where all students learned all letter sounds and names by the end of the school year. They also maintained that knowledge for the remainder of the year.

Research suggests that "phonemic awareness and letter knowledge [are] the two best school-entry predictors of how well children will learn to read during their first 2 years in school" (National Reading Panel, 2000, Chapter 2, pg. 1). This project suggests however that this need not be the case and that there may still be time, and steps can be taken following school entry to positively influence a child's 'potential' when compared to that of their peers.

Group C, with no outliers, the lowest performing student/s knowing 6 letter associations and the highest average across all five groups (47), appeared to have the greatest potential to have all students learn all letter sounds and names before all the other groups. Group E, with no outliers and the lowest average across all five groups (34), appeared to have the greatest potential to be the last to learn all letter sounds and names. Group A was placed fourth out of the five, upon school entry. These entry scores did not predict the speed at which those students would learn all letter sounds and names. Group A, in spite of entering in fourth place, became the highest performing class by the end of the first term and maintained that position for the remainder of the year.

Group E, the lowest performing group, overtook group D by the end of first term. By the end of term 3 their average score was higher than that of all other group, other than Group A. By the end

of the year they were equal to Group A in average, though not all children had learned all associations. This suggests that initial entry scores don't necessarily dictate who will learn all letter names and sounds first. This then calls into question whether phonemic awareness and letter knowledge skills upon school entry or rather by the end of the first year of schooling, is the most predictive indicator of whether a student will be a successful reader in subsequent years.

Implications for Teacher Practice

Upon school entry, there were students in all five groups who knew many letter names and the most common sound for each. There were also students in all five groups who knew very few, if any, letter sounds and/or names. The question was posed when this project began whether the use of feedback with young students would privilege those who were more academically advanced than their peers, where for the purpose of this study academic skill was measured solely by letter identification and letter sound knowledge. In order to determine whether this was the case the authors thought to track individual student progress. If low scoring Group A students were surpassed by students in the other groups, this might have indicated that they were not meeting their 'potential'. Were students who achieved relatively high scores to be surpassed by students in their own class or students in other groups, this might also have suggested that they had not met their 'potential' and that this approach was privileging others members of the group.

Figures 5 and 6 show however, that most Group A students maintained their potential. The highest performing students upon school entry (14F, 2F, 3F), were one of the first four students to learn all letter sounds and names by the end of first term. The lowest performing students (7M, 9M, 4M), though the last three to learn all letter sounds and names) still learned all letter sounds and names relatively quickly when compared to the other groups, learning all letter sounds and names by August 4.

There were two anomalies. 5M surpassed his potential. He only knew 48 associations upon school entry, placing 7th, but was the first to learn all letter sounds and names. 15M was placed 8th in Group A upon school entry knowing 33 associations, but was among the last four students to learn all letter sounds and names (though this was achieved by the end of term 2, earlier than many students from the other groups). Apart from these two students the remainder of the students maintained relative 'potential' when compared to peers in the same class. This finding would seem to suggest that the conferencing process did not privilege students who entered school with more advanced academic skills than their peers, or vice versa.

Conclusion

Results from this study would seem to suggest that when reading programs include the provision of individualise, timely feedback, students as young as those found in their first year of schooling can receive and act upon the feedback that they have been given. It does not appear from the results of this study that the provision of such feedback detracts from the effectiveness of the phonemic awareness programs that students would traditionally have received in their first year. Results from this study would also suggest that there is time, in the first year of schooling, for teachers to influence student letter-sound and name knowledge; a component of skill of phonemic awareness. With research finding that phonemic awareness is a precursor or predictor of future reading success, this study would suggest that there is time in the first year of a child's schooling to influence whether children will have future reading success. The use of the conference with the key features of a discussion of academic performance and goal setting have indicated that success can be

achieved with all first year students and not just those who are more academically advanced. Whether the speed at which students learned letter sounds and names can be directly attributable to the student/teacher conference or whether there needs to be a combination of a number of key factors is an area of focus that would warrant further research.

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