Welcome to the third term edition of the SERUpdate. This term a number of presenters from the Special Education Expo have offered to write articles providing information on their presentations. Libby Brown, Convener Special Education Expo, has written the introduction which provides an overview of the highly successful event.

The articles cover a broad range of topics. These include handwritten communication, oral language, reading, maths, managing behaviour, school readiness, the Better Pathways Project, the MindUP Curriculum and the LitCon Special resource.

The Special Education Expo has always included a strong focus on workshops related to inclusive technologies. In the past presenters from interstate have been invited to run workshops, along with the SERU learning technologies project officers. In recent years there have been an increasing number of DECD teachers successfully using new technologies who are willing to share inclusive practices at interstate and local conferences, including the Special Education Expo. This has resulted in the Inclusive Technologies strand becoming a national leader in the provision of a technology in special education professional learning program. Many of this year’s presenters have contributed articles that focus on iPads and apps, Universal Design for Learning and Technology, getting the most from the Mac, eBook authoring, and speech recognition tools. There are also technology articles related to AAC (Alternative and Augmentative Communication) for students with complex communication needs around both dedicated speech generating devices and apps for tablet devices such as the iPad.

Dymphna James
Assistant Manager
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The Ninth Annual Special Education Expo was held at the Education Development Centre, Hindmarsh during the first four days of the July school holidays. I wonder if those who initiated and organised the first expo in 2003 could have predicted that it would be still going and growing nearly ten years later.

The Expo provides a range of opportunities for regional support personnel and educators to increase their awareness and knowledge about the effective teaching and learning strategies, resources and new technologies, that educators can use to support learners who have disabilities and learning difficulties. The 2012 expo program consisted of 6 pre conference workshops on Monday 2nd July and seventy three workshops across the following three days.

This year there were 484 registrations, higher than previous years, and 1551 attendees over the 73 sessions. The expo has proved popular with both beginning and experienced teachers and there has been a slow increase in the number of middle and secondary teachers attending. Many teachers and SSOs have attended multi expos and have commented that it provides a fantastic opportunity for them and to share experiences with colleagues.

Thank you to the many presenters who generously give up their time to develop and present practical, up to date information on a broad range of topics in the following strands: Literacy and Numeracy, Curriculum, Differentiation, Inclusive Technology, Communication, Wellbeing/Mental Health, Learning Difficulties and Disability. Their high quality presentations ensured that all expo participants went away from the expo with strategies and ideas that could be implemented and incorporated into classroom practice.

Feedback from participants included:

**Fantastic, practical, interesting and informative sessions.**

**There will be lots of experimenting to see which things will benefit my students most.**

**I have found new ways to increase the use of the interactive white board in my classroom.**

**Very enlightening presentations, I will be adding much of what I learnt today in my teaching practices.**

**Great ideas for incorporating families.**

The Special Education Expo provided an opportunity to partner with a number of agencies including Novita Tech, Autism SA, Inclusive Directions, TAFE SA and SPELD. The exhibitor’s room proved to be a great way of seeing new resources and meeting with the resource providers. My sincere thanks to those involved for sharing their knowledge and expertise at display and trade tables. Thank you to Gerry Kennedy and Dian Jones who travelled from interstate to present workshops and to Catholic Education in NSW for paying for Jeanette Davies to present at the expo.

Thanks also to the staff at SERU who have continued to support the Special Education Expo through registration support, supply and support with the technology and in the provision of a display of SERU resources.

My thanks to all the people who have supported and attended the Special Education Expo and in particular to the Special Education Expo committee Helen Kowalenko, Jim Sprialis, Melissa Campbell, David Horsell and Ingrid Alderton, and the very active volunteers who supported the committee; Jen Bratovic, Fiona Lymberopoulos and Linda Hale.

Discussion is underway about reviewing the way the expo is presented and we look forward to an even more exciting Special Education Expo in 2013.

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TEACHING STUDENTS WITH DIVERSE DEVELOPMENTAL SKILLS TO PRODUCE HAND-WRITTEN TEXT IN THE 21ST CENTURY

Introduction

Knowledge about brain function and learning has changed significantly during the past decade. Therefore educators need to use the scientific evidence that is now available to understand individual differences in student development so that appropriate instructional decisions are made to assist all students to learn to write (Geake, 2009). My initial interest in this topic began when reading an article written by Benjamin Bloom in the journal Educational Leadership (February 1986). Bloom discussed research about automated processing of essential skills to enable success in complex tasks. Automaticity of any skill relates to the mastery of that skill, whether it is a routine daily task or a highly refined talent (Berninger & Graham, 1998; Bloom, 1986). Automated processing is the ability to perform a task unconsciously with speed and accuracy while consciously being involved in higher order thinking. Examples of automated skills include reading while comprehending, writing while thinking of upcoming text, spelling and punctuation, or calculating basic number facts while computing a mathematical problem. Bloom discussed the responsibility of schools, especially in the elementary level, to develop automated basic skills to enable students to process more complex tasks throughout schooling and work.

Educational neuroscientific research also provides information concerning the critical role that a student’s emotions play in learning and behaviour. It is important that appropriate pedagogy is provided to enable the development of essential skills for each student, given that negative emotions, particularly anxiety and fear, can reduce a student’s ability to learn (Berninger & Richards, 2002; Geake, 2009; Rock, 2009). Since “learning is driven by life experiences, rather than chronological age”, appropriate curriculum and effective pedagogy needs to be understood and selected (Geake, 2009, p.64). Hence, understanding individual development, cognitive processing and emotions that influence motivation and learning will enable appropriate instructional decisions for all students.

Producing handwritten language is one of the most complex tasks that a child needs to learn. Handwriting to communicate involves the rapid and precise synchronization of multiple brain functions in the domain specific areas of cognition, language, visual-spatial, motor and kinaesthetic development (Berninger & Richards, 2002; Levine, 1994). This information activated my thesis research to identify pedagogy that positively influences the teaching of handwriting to young students who begin schooling with widely differing developmental skills. The thesis also identified intervention strategies to assist students with average and above average cognitive abilities who have difficulty in producing written language. Such students with handwriting difficulties can express their thoughts and ideas verbally however, they are unable to reproduce these ideas in the complex task of handwritten text. Research shows that specialized neural functions within the brain need to be connected into a neural network that works simultaneously to enable the production of complex skills. Neural networks that enable a complex task to be completed require consistent practice as this is the most valuable component needed to consolidate learning and memory of automated skills (Geake, 2009; Raichle, 1994).

Early Years: Learning to Write

Unfortunately the need for handwriting instruction and early intervention in the critical period of a child’s development is not as widely understood as reading instruction (Benbow, 1995; Berninger, 1994). Postponing explicit instruction may miss a critical developmental window to teach writing to young children. When a child begins to “draw” words, developmentally appropriate instruction is required to teach letter formations. Handwriting requires precise sequentially ordered component strokes to produce each letter therefore the visual-spatial requirements for letter writing are more complex than the visual-spatial requirements for letter recognition in reading words or for letter selection on a keyboard (Berninger & Richards, 2002 p.169). Such learning requires synchronized neural pathways to be developed to enable letters to be written accurately from memory. Writing letters and words from memory is the automated skill that is required to produce handwritten communication. This skill differs in complexity to tracing or copying letters, hence explicit pedagogy is required for young children who are learning to write to communicate. Given that the draft Australian National Curriculum requires students in the Foundation year to write short text to communicate, it is crucial for educators to understand appropriate developmental strategies for early writing success.

My thesis research and continued work with early education teachers and students emphasizes a multi-sensory approach to teach letter names, sounds and formations. The variation of neurodevelopmental skills of young students requires explicit and diverse instruction in handwriting to enable individual success (Berninger & Graham, 1998). Consistently guiding students to achieve successful skills has a more positive influence on learning and memory than correcting mistakes (Geake, 2009; Syed, 2010). Thus, pedagogy focuses on using large letter tracks to guide consistent formations, a variety of coloured writing tools, visual prompts and verbal cues to scaffold the learning of all letter formations (Graham & Weintraub, 1996).

continued
Therefore, each student is guided to produce automated handwriting so that all letters are written accurately from memory regardless of writing size. Unfortunately when handwriting instruction requires all students to use precise fine motor skills for pencil control to write letters, many students are unsuccessful in learning to write at a young age (Jones, 2004).

Large letter track on an easel ready for “paint brush writing” starting with the green dot (green for go and red to stop: like traffic lights)

Using developmentally appropriate strategies to teach young children to write, focuses on fun activities that enable consistent practice of letter formations resulting in successful pattern recognition (Syed, 2010). Such strategies reduce the initial task complexity of learning to write. This enables young children to begin to produce handwritten language using larger size letters. Hence, students are encouraged to write to communicate from an early age. They can gradually learn to produce smaller writing that requires precise fine motor control according to individual development. These altered instructional strategies have resulted in improved accuracy and fluency of letter writing from memory. Without automated handwriting and knowledge of letter sounds, the transcription process of writing words to communicate ideas cannot occur (Berninger, 1994; Graham et al., 2001). Transcription difficulties continue to result in poor written communication skills for older students as well as beginning writers. Improving individual student’s automated handwriting outcomes results in a positive influence on written language development and spelling (Berninger, 1994; Jones, 2004).

Early writing using unlined paper and large coloured felt pens to write after 3 months of handwriting instruction

Middle Years: Functional Writing to Communicate

“Writing is not the mirror image of reading” (Berninger & Richards, 2002, p.167). Constructing meaningful text while writing draws on visual, auditory, vestibular, kinesthetic and proprioceptive systems as well as cognitive, language and executive functioning; hence consistent neural pathways need to be established for success in this complex skill (Berninger & Richards, 2002). Some older students are not able to produce automated functional handwritten communication so it is necessary to be able to assist these students with specific intervention. Research shows that students who write poorly see their failure each day as handwriting produces a visible language that permanently records all functional difficulties. These students are at risk of developing low self-esteem, anxiety, poor motivation or depression about writing and schooling (Geake, 2009; Levine, 1994). Additionally, these students may develop secondary behavioural difficulties in an effort to mask their failure. In today’s classrooms the time for learning automated handwriting is reduced due to the expanded curriculum and the need for students to learn both functional handwriting and computer skills. Regardless of the impact of technology on education, handwriting skills continue to be required for written communication in the majority of curriculum areas in education and in everyday living. Hence, specific intervention strategies are important as difficulties in producing this basic skill can negatively influence a lifetime of learning.

Planning what is to be written, along with procedures and strategies for generating handwritten language, is stored in working memory while the text is being constructed (Swanson & Berninger, 1994). Individual differences in working memory capacity are influenced by automated essential skills, experience and emotional factors. Thus, automated letter writing is required before letter combinations to form words can be automated to enable the student to produce handwritten text. These basic skills will develop at different rates in individual learners. Therefore, some students will be limited by the available working memory required to attend to processes that include handwriting, spelling, grammar, content, sequence and genre while composing. For these students “transcription continues to exert large resource demands of working memory well into adolescence” (McCutchen, 1996, p. 319). It is an essential goal for all students to be able to produce legible and accurate handwriting of 100 letters per minute prior to secondary schooling so that note taking and written tests can be completed within allocated time limits.

As students enter Year 2/3 and in older year levels the cursive script style used in handwriting may influence the speed and legibility of writing.
Writing more than single letter formations involves parallel processing in addition to sequential processing because upcoming letters need to be cognitively prepared in advance while concurrently executing the preceding letters (Graham, 1998). Learning a new script requires extensive consistent practice. Thus, when students begin to write using cursive script they are often slower to produce writing as they need to give attention to the specific joins between letters as well as composing. Consequently, when asked to write using cursive script, a student may simplify the composition of the language being written if working memory capacity is challenged (Levine, 1994). Hence, some children may be unable to meet the multiple demands imposed by this writing process, however they can produce automated print script as this reduces the working memory capacity required for handwritten communication (Berninger & Richards, 2002). Therefore, the choice of print script by many people in secondary school, university and business “may reflect a general search by the writer for a more efficient and fluent style of handwriting” (Graham, 1998, p. 297). In fact many professionals and business operators choose to use only upper case print script for handwritten communication as this reduces errors in misreading the information written and it is also the script required for the completion of all official forms. This style of script may need to be selected for some students who continue to have handwriting difficulties as it requires only twenty-six letter formations to be automated to enable the production of handwritten language, hence this reduces the demands on available working memory.

If early handwriting is not automated, confusion may occur when additional links are taught to produce cursive script. This results in reduced accuracy and fluency in handwritten communication. Therefore, it is important to establish one style of automated handwriting that is the most fluent functional script for each individual student. The writing task in the NAPLAN assessments requires students to produce functional written communication, however script style is not assessed. Indeed this is also the reality of handwritten communication in our society. Writing activities happen daily in homes and in work places and although each person uses the alphabet system, no one actually uses an exact style of script. In fact, each person has automated a personal script style to produce handwritten communication.

All students need to learn to write to communicate, however societal expectations tend to ignore the complexity of this task. There is little understanding of the reduced practice time available in the extended curriculum of today’s schools. Therefore, I question whether requiring all students to learn an exact style of cursive script for handwritten communication is a relevant task in the twenty-first century as students not only need to develop a fluent personal script for written language but they also need to learn to use electronic text for communication. Hence it is important that educators make informed decisions about automated handwriting skills that are taught to individual students in the limited time available to learn all tasks required for success in today’s society.

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References


In recent years there has been an increasing emphasis on speaking and listening skills for children and a growing awareness that more time needs to be spent on developing these skills. Dr Pamela Snow, School of Psychology, Psychiatry and Psychological Medicine at Monash University, for a number of years has researched and written about young people caught up in the juvenile justice system and has found that over half of young offenders were language impaired. Her model shows the effects of oral language competence on successful school completion and a positive pathway into post-school options and is a powerful advocate for the importance of developing good oral language skills in children, especially in the early years.

Oral Language Competence: Importance for Learning and Social Engagement

Oral language Development

Children learn language by interacting with other people in a social context and, especially in the early years, through play. Adults perform an important role in extending children’s language through sharing enriching experiences, talking about them and expanding and remodeling children’s attempts to communicate. Play provides the foundation for learning language, developing thinking and reasoning skills and fostering social skills. Just think about a group of children playing in a sandpit. Their language is contextual, so where they are and what they are doing provides much of the information in the message. You might hear this: “Pass me that yellow one.” “Don’t put it there!” “I’ve made a long one!” And then when they tell someone else about their activity they might say: “Well we dug it up and made a road, he nearly messed it up.”

This is still not making sense but through questions such as “Where were you playing? Who were you with? What were you doing?” the contextual details are filled in and the child’s communication is able to be understood. Through this exchange the child also learns to include relevant details to improve his effectiveness in communication, and so his oral language skills develop in a social context.

Why is oral language competence important?

Oral language competence in early childhood is a strong predictor for the development of social skills, which are required for the establishment of friendships and the ability to problem solve in social situations, especially resolving conflict. Oral language competence is also a predictor for the successful transition to literacy and proficiency with more complex speaking and writing.

Oral language and literacy

Oral language underpins literacy. The Conceptual Framework for literacy instruction uses the 5 big ideas in beginning reading – vocabulary, phonemic awareness, phonics, fluency and oral comprehension. All of these components have been identified in quality research as the areas for teaching reading that would most benefit children with reading difficulties. Vocabulary, phonemic awareness and comprehension are oral language skills; however fluency and phonics also have elements of oral language skills.
Children commencing school with poor language skills have been shown to be at an increased risk of literacy difficulties as they may not have the abstract and complex language skills required to access early literacy instruction. Literacy learning requires an ability to think about language (meta-linguistic awareness), for instance prediction skills, word meanings and letter-sound links. Children develop and practise these skills in speaking and listening. Comprehension of written text, in which readers are required to build a ‘mental model’ of the situation described in the text, depends on oral language ability, in particular vocabulary, conjunctions and sentence and story structure.

Oral language and social skills

Social situations are very complex and require a high level of language skills to be successful, as participants need to integrate verbal and non-verbal messages, infer meaning and use language appropriate to the context. Social competence also requires an understanding of colloquial and peer-group language, which is often abstract and complex in meaning. Conversation skills involve turn-taking, coherence and topic maintenance and these skills develop within play and social contexts.

Promoting Oral Language in your Classroom

Show that you value oral language

- Let students know that you consider oral language skills to be important.
- Show genuine interest in student’s oral contributions and work on encouraging an oral response from children.
- Wait longer for a response and show that you expect one.
- Communicate with parents about the importance of oral language for literacy and learning.
- Use parent help in the classroom for oral language activities as well as reading.

Provide lots of opportunities to use oral language

- When planning your program, set times for whole class, small group or partner oral language activities. Include oral language activities in all learning areas.
- Program a range of activities from simple to abstract. Children with language disorder will have more success with language activities that are more experiential and hands-on. However all children need to engage in activities from simple to abstract and complex to develop their literacy skills.
- Monitor children’s language development by observing children as they interact with each other. It is important to assess their skill development to assist in planning programs that are inclusive and appropriate for the child’s level of understanding.

Explicitly teach oral language skills

- Students with language disorder do not pick up oral language skills through simply observing others. They need the structure and organisation of different oral text types to be explicitly taught and be given opportunities to practise them.
- Model oral language skills by ‘thinking out loud’.
- Provide visual scaffolds to support the acquisition of oral language skills.

Use teacher talk to advantage

- Allow time for students to respond – at least 3 seconds for all children, longer for children with oral language difficulties. Students with language disorder process language more slowly and so need more time to respond to instructions or questions.
- To make communication as clear as possible, chunk information - use pauses and stresses to highlight main points. Students with language disorder find it difficult to extract important information from oral text and so will often misunderstand instructions or information.
- Support instructions visually.
- Extend student’s thinking skills with thoughtful questioning. Questions need to be pitched at the student’s level of understanding and within a familiar context.
- Show enthusiasm for language by engaging in meaningful and fun activities that explore words and text.
Set up for learning success

- Assist students to integrate new information by activating background knowledge, linking new learning to the familiar.
- Use visual scaffolding like mind maps and other graphic organizers to make the language visible and help to organise thinking.
- Use information from your assessment and evaluation of student’s oral language to ensure that the classroom program and individual activities are pitched at an appropriate level for successful learning.
- Teach new concepts one at a time to avoid confusion.

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MINILIT: WHAT IS IT AND DOES OUR SCHOOL NEED IT?

Minilit has been a long time coming. In 2007 an article in the Australian Journal of Learning Disabilities (Vol 12, Issue 2, 2007) described a new program called Meeting Initial Needs In Literacy MINILIT: a ramp to MULTILIT for younger low-progress readers. Why did children need to fail to learn to read, why not teach reading well in the first place?

The Minilit Program was launched in Sydney in October 2011. Following this, Minilit was presented at a session at Elizabeth North Primary School in February 2012.

MULTILIT, stands for Making up for lost time in literacy. This program has been around since 1998 and was revised in 2005. It is an evidence based program that has been developed by Macquarie University’s Special Education team to teach students, over the age of 8 years, how to read. Minilit, which has been developed by the same group, provides a program for struggling young readers. Both programs use direct instruction techniques and are explicit and systematic programs. Unlike MULTILIT, which is based on the narrow view of reading, Minilit is based on the balanced view of reading.

Minilit is for young struggling readers, which is described as the bottom 25% of year 1 or at risk year 2 students. It is a wave 2 intervention or can be used 1:1 as a wave 3 intervention. The program is for a small group, 4-5 students, with a trained presenter, for 1 hour 4 times a week. The kit provides all the materials that are needed to present the 80 structured lessons (40 at each of the 2 levels) which should happen over 2 school terms. A school would first identify struggling readers and then administer a placement test from the program which indicates where to start teaching. The school would need to select 4-5 students who have the same starting point.

The program is based on the idea that you test first then teach. There are regular reviews of progress and clear guidelines for when you move to the next level. It is suggested that schools run 2 groups so they can move students between the groups if needed.

Each lesson consists of 3 parts- sounds and words (30-40 mins), text reading (7-10 mins) and story book reading (7-10 mins). There are 2 levels in the program. The scope and sequence for level 1 includes phonemic awareness, single letter-sound correspondences, reading and spelling of 2-3 phoneme words, common digraphs, capital letters, sight word recognition, text reading, story book reading and games. Level 2 focuses on common letter combinations, reading and spelling words with 3 -5 phonemes, bossy ‘e’, sight words, text reading, story book reading and games. The games are fun activities to keep students on task and to reinforce skills.

The program is fast paced, students are doing a range of activities, correct responses are modelled and students move from teacher modelling to independent practice. The kit contains the teacher manual, the handbook, work books for the students, sound and word cards, and testing and record keeping materials. The school needs to provide multiple copies of phonic based readers and have access to the school’s library for the story books.

Each lesson provides the details of materials that are needed for the lesson, what the adult says, including hand actions, and what students responses should be. The two day training program teaches exactly how to implement the program and is essential for those wanting to purchase the kit.
WHY DO SOME CHILDREN STRUGGLE WITH READING? IS THERE A RELATIONSHIP BETWEEN DYSEXIA AND AUDITORY PROCESSING DISORDER (APD)?

English is an alphabetic language, meaning that the written symbols of the language are closely related to the phonological system. The phonological system of a language may be described as the underlying shared system of speech sounds that we use to convey meaning. Alphabetic languages rely on a process of converting this spoken, phonemic code into a visual, orthographic code, which is then converted back to speech when reading. Since the orthography of alphabetic languages such as English is based on the phonological system, an understanding of the relationship between sound and letter patterns facilitates the “breaking of the code” in written language. This process is called decoding, and allows the reader to successfully read unfamiliar words and develop visual word recognition skills. Decoding allows children to access the thousands of words they have already heard but have never seen in written form. Despite being an alphabetic language, English does not have a consistent orthography (like Finnish or Italian, for example) in which every phoneme, or sound, in the language has a corresponding grapheme (a letter or group of letters representing one phoneme), with some graphemes representing more than one phoneme (compare “school” with “chip”), and some phonemes represented by more than one grapheme (consider “her,” “bird” and “turn”). Nevertheless, most of English spelling is based on the phonology of the language. Approximately 50% of English words can be spelt correctly with grapheme-phoneme conversions alone, and a further 36% can be spelt with the exception of one grapheme-phoneme inconsistency (Hanna, 1966), making strong decoding ability a very powerful tool for self-teaching.

Decoding skills are crucial when reading unfamiliar regular words with consistent sound-symbol relationships (such as the words “strips”, “representing” and “hippopolomonstrosesquippedaliophobia”) as well as non-words - made up words that consist of permissible spelling patterns but have no meaning (such as the words “scritten”, “borker” and “vasster”). Decoding skills are not so useful when reading unfamiliar irregular words (words that do not contain regular grapheme-phoneme patterns, such as the words “bureau”, “yacht” and “colonel”). While most children acquire decoding ability without too much difficulty, a significant proportion of the population (around 20%) have great difficulty in developing adequate decoding skills.
Poor decoding skills lead to difficulty in reading unfamiliar words, and poor self-teaching. An overwhelming body of research suggests that in general, poor readers have poor decoding skills and that better readers have better decoding skills. “Yes, but what about comprehension skills? There is a lot more to reading than decoding!” I hear you say. Of course, comprehension skills are crucial in the reading process, and the importance of developing language skills cannot be underestimated. Indeed, research suggests that good decoders with poor reading comprehension also have poor listening comprehension skills and therefore are likely to have underlying language difficulties. However, research also suggests that a large proportion of children with reading comprehension difficulties are poor comprehenders due to decoding difficulties (see Vellutino, Fletcher, Snowling, & Scanlon, 2004 for a review). In addition, the ability to read irregular words depends highly on reading experience and decoding ability (Sprenger-Charolles & Serniclaes, 2006).

So, the bottleneck for the majority of poor readers is related to poor decoding skills. Decoding difficulties are a hallmark of dyslexia. A large body of behavioural and neuro-imaging evidence suggests that the core deficit in children with dyslexia is impairment in phonological processing skills, which may be defined as an individual’s understanding of the sound structure of language. This phonological processing deficit leads to impairment in the ability to map the written representations of the language onto its sound structure, resulting in poor decoding, poor self-teaching and poor reading ability.

Researchers have devised a number of phonological processing tasks which are thought to tap into the underlying phonological processing deficit in individuals with dyslexia. Phonological awareness tasks (which involve assessing the ability to identify, reflect upon and manipulate the sound units of language) and in particular phonemic awareness tasks (which involve evaluating awareness of individual sounds in words) are consistently found to be significantly more difficult for individuals with dyslexia compared with individuals without reading difficulties. Phonological memory tasks (which assess an individual’s ability to recall what was just said) and rapid naming tasks (in which the individual is required to name a series of objects, colours, numbers or letters as quickly as possible) also consistently reveal relative weaknesses in individuals with dyslexia. In addition, at least a sub-group of individuals with dyslexia demonstrate speech perception difficulties, with some studies even suggesting that speech perception measures at infancy are a highly predictive indicator of later reading acquisition (e.g. Lyytinen et al., 2004).

These observations have led researchers to propose the “phonological deficit hypothesis”, which posits that phonological processing tasks depend upon the strength of phonological representations: the brain’s representations of the sound structure of language. These phonological representations are thought to be weaker, or ‘less specific’ in individuals with dyslexia. But what could cause weak phonological representations? There is evidence to suggest that the phonological system becomes increasingly sensitive to phonemic differences between words as vocabulary size grows (e.g. Ziegler & Goswami, 2005), suggesting a close relationship between vocabulary skills and phonological processing, and leading some researchers to suggest that phonological processing weaknesses stem from weaker vocabulary skills in individuals with dyslexia. There is also evidence to suggest that in at least a sub-population of children with reading difficulties, phonological processing difficulties may be related to an impairment in the perception of low-level (non-speech) auditory signals, which some authors have suggested could interfere with the brain’s ability to form precise representations of the sounds of language (e.g. Tallal, 1980). While this is a contentious and disputed hypothesis, recent brainstem timing studies have again highlighted the potential role of auditory processing in reading difficulties, with researchers finding significant correlations between low-level auditory processing and reading ability (Banai et al., 2009). To date, however, the effect of auditory processing deficits on reading development has not been clearly established.

Surprisingly, there has been a paucity of research investigating the phonological processing and reading abilities of children diagnosed with APD (Auditory Processing Disorder). APD is diagnosed when an individual has significant difficulty in identifying or discriminating between sounds despite normal peripheral hearing, and has been defined as, “A deficit in the processing of information that is specific to the auditory modality” (Chermak, 2001, p. 10). APD offers a potentially invaluable opportunity to study the impact of auditory processing difficulties on reading ability. The handful of studies investigating reading skills in children with APD suggest that there may be a relationship between APD and reading difficulties. For example, in her doctoral study investigating the receptive language and reading skills of children diagnosed with APD, my colleague Dr. Stephanie Mallen sought to match the reading age score of 21 children diagnosed with APD to 21 ‘average readers’ in order to analyse reading error patterns. Interestingly, it was discovered that the matched ‘average’ group were also significantly younger (by a mean of 13 months) than the group with APD, indicating that the reading accuracy skills of the APD group were significantly poorer than the average reader group (Mallen, 2010). Meanwhile, Dawes and Bishop (2010) found that 52% of children with APD (N=25) would fit a diagnosis of dyslexia or specific language impairment (SLI), or both.
In my own doctoral study (Rajkowski, 2012), I evaluated numerous skill areas thought to be related to reading development in a group of 57 children aged between 8 and 11. The group consisted of three sub-groups: 19 control children (the CON group), 19 children diagnosed with dyslexia (the DYS group) and 19 children diagnosed with APD (the APD group). The three groups were matched for age and non-verbal IQ, allowing for a comparison of skills between the three groups. Results revealed that the APD group showed significantly poorer phonological awareness, phonological memory and rapid naming skills compared to the CON group. The APD and DYS groups showed similar phonological processing and vocabulary skills (with no statistically significant differences in abilities between the APD and DYS groups), suggesting that significant phonological processing difficulties are a feature of APD. This result was consistent with the reading assessment, which revealed that the APD group also had significantly poorer reading ability (for regular, irregular and non-words) than the CON group, indicating that the APD group had significant reading difficulties. The APD and DYS groups demonstrated the most significant relative weaknesses in their ability to read non-words, consistent with the prediction that the two groups would have specific and significant difficulties with decoding skills. Despite being significantly poorer than the average group, the results also showed that the APD group were significantly better at reading compared with the DYS group, with the DYS group demonstrating the poorest decoding and grapheme knowledge of the three groups. The results suggested that while children with APD may not be as reading impaired as children with dyslexia, children with APD are likely to have significant reading difficulties compared with ‘average’ children. My research suggests that as for the children with dyslexia, these reading difficulties are characterised by deficits in phonological processing, decoding ability and grapheme knowledge.

So is there a relationship between dyslexia and APD? The results of my study suggest that children with APD are at significantly greater risk of phonological processing and associated reading difficulties compared with ‘average’ children. While more research is needed, it is possible that these difficulties are related to APD interfering with the formation of phonological representations (this possibility is explored in detail in my thesis). It is important for teachers to be aware of the potential connection between APD and dyslexia, and for audiologists performing APD assessments to be mindful of the likelihood of reading difficulties in children with APD so they can refer on accordingly. Finally, current research and my own study highlight the importance of assessing and strengthening phonological processing, grapheme-phoneme knowledge and decoding skills for all children. The evidence is clear and consistent with the 2004 Australian Government Inquiry into the Teaching of Reading: students will benefit most from methods of teaching reading that explicitly teach the relationship between phonology and orthography in language, helping them to ‘break the code’ and master self-teaching.

References


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What is the potential or need of using priming in education? A prime is like a filter. It helps you focus on things that are relevant at the time, blinding you to other things that may be irrelevant. We ‘prime’ ourselves through our unconscious motivations every day. You may wish to buy a car that is silver, and then start seeing that colour car everywhere. A standard definition of priming can be demonstrated as:

Cognitive representations could be temporarily activated – a procedure known as priming – outside of awareness, to influence subsequent perception and behavior in prime consistent directions (Radel et al, 2009, 695).

In Education we have been regularly using mindsets as filters to influence and improve how students think, attend and feel (de Bono, 1985; Gardner, 2008; Costa & Kallick, 2009) for a few decades now. Whereas mindsets can be viewed as explicit conscious devices influencing aspects like attention and thinking, priming works on the implicit unconscious level.

Neuroscientists and cognitive psychologists see priming as a window in how the unconscious/automatic brain and the conscious state of mind interact (Naccache & Dehaene, 2001; Pesciarelli et al, 2007). Collaborative research from these two areas are demonstrating alarming results in how psychological states of mind like stereotype threat (Huguet & Regner, 2009; Mangels et al, 2011) can greatly affect our performance and self-concept in something as rudimentary as mathematics.

If you are a girl, and you believe that girls are no good at mathematics, you have greatly tainted your state of mind and cognitive prowess in the subject area. This is negative affective priming at its worst.

Maths Anxiety has been around for the last fifty years and can be defined as:

mathematics anxiety involves feelings of tension and anxiety that interfere with the manipulation of numbers and the solving of mathematical problems in a wide variety of ordinary life and academic situations. (Richardson & Suinn, 1972, 551).

If sufferers of Maths Anxiety can develop aversions to maths words and concepts, they can develop semantic affective cues like ‘hate’, ‘dislike’, ‘too hard’ every time a maths idea comes up thus becoming ‘negatively’ primed emotionally. It has been demonstrated that priming can affect mood (Stapel, Koomen, & Ruys, 2002) and performance (McNamara, 2005). Therefore the trend to use positive psychology in the classroom is becoming more important than ever. A teacher may try to unravel and break past negative experiences and language, while building and reaffirming new positive language and experiences.

Helping students design a positive vocabulary for themselves develops a strong semantic link to their unconscious. Combining this with other student vocabularies can be mirrored on things like an unobtrusive power-point presentation on well-located lap-tops around the classroom, while the teacher is performing a maths lesson. Although this can be viewed as subliminal messaging (as seen in advertising) it can have a powerful impact on the state of mind of a student.

Positive Affective (Emotion with Meaning) Priming can be part of an overall antecedent approach that includes more explicit cues like positive prompting and sign-posting (visual cues like posters). Including some positive discussion about mathematics and positive feedback at set regular times throughout a lesson, can significantly boost the performance of students.

It may seem unusual to use a fair amount of positive speech and feedback in a maths lesson, but it greatly influences the performance (aptitude, accuracy and attitude) of students, if explicit cues are used alongside implicit cues.

There are many types and complex overlays between cognitive, perceptual, semantic, and affective priming (to name a few), but if educators can understand the use of implementing a priming stimulus to gain a target stimulus, the educational applications are countless.
An example could be giving a puzzle or word game task to a student with polite words in it. After completing the task, you ask your student to give a message to the Principal. You will find that there is a strong likelihood that the student will wait patiently and politely before giving the person the message. If however, the puzzle had abrupt assertive words in it, there is a far greater likelihood that the Principal would be interrupted at the first given chance.

All of the memories, experiences, and learnt behaviours of students are therefore within reach of their teachers. Implicit measures like priming gives teachers snap-shot access and exposure into the ever-accumulating and evolving constructivist mind of their students. Teachers can have a powerful indiscriminate tool to partly assess and diagnose what is going on in their students’ brains, and appropriately, influence and imprint new ideas and directions.

Your conditioned emotional response to a scary situation is not something that you consciously or verbally recall, it is immediate. For someone with a severe anxiety or phobia the conditioned emotional response can result in severe physiological or neurological impact.

Like the conditioned emotional response, affective priming is also immediate and can help unravel and change habits and memories.

Only in recent months, cutting edge neuropsychological research has provided solid evidence of the neural correlates of Maths Anxiety (Young et al., 2012). Hyperactivity in the right hand side of the amygdala (the emotional centre of the brain) is affecting cognitive information-processing resources like attention and working memory which is also evident in many phobias. This highly important information is influencing researchers to look at psycho-educational interventions (like priming) for possible answers:

This work suggests that educational interventions emphasising control of negative emotional responses to math stimuli (rather than merely additional math training) will be most effective in revealing a population of mathematically competent individuals, who might otherwise go undiscovered (Lyons & Beilock, 2011)

In conclusion, I believe that we as teachers can start to use priming as an aid to learning and a transformer of past negative attitudes and experiences. The power of the unconscious mind is only beginning to be unravelled by cognitive psychologists and neuro-scientists alike, and priming seems to be one of the first keys to unlock this incredible resource.

Priming is one of the first layers of perception, which prepares the mind’s canvas for later perception, thinking and behaviour (Fockenberg, 2008, 8)
Gordon Education Centre identified a need to assess literacy for students with intellectual disability or significant cognitive delay. Following two years of research and development, the LitCon Special is currently being trailed across the Limestone Coast region.

**Introduction**

Literacy is a broad term that encompasses Reading, Writing, Listening and Speaking. As each student has varying capacities for learning, the LitCon Special has the ability to demonstrate progress across some or all of these domains, providing teachers with a comprehensive curriculum planning, assessment and reporting tool for students.

**Who is it for?**

Teachers, para-professionals and leaders of students with intellectual disability or significant cognitive delay.

**What are the benefits?**

- Learners can be placed within the zone of proximal development in each component of Literacy
- Professionals are able to access more detail about the pedagogy underpinning the LitCon Special targets, connecting relevant resources
- The LitCon Special is linked to the learner’s Negotiated Education Plan (NEP) and Reporting format
- Professionals are able to access Improvement Data, which is embedded within the LitCon Special to demonstrate progress in the areas of Literacy to staff, learners and families

**How is it structured?**

1. **Targets**

The LitCon Special is structured into eight targets, which are used to assess the learner’s capabilities

- Adult Interaction
- Awareness
- Recognition
- Making Connections
- Practice
- Transference
- Functional
- Independent

A learner at the **Adult Interaction** level:

- Is immersed in the environment provided by the adult through explicit modeling, intensive interaction and a print rich classroom
- Is anticipated to be at the pre-intentional communication stage

A learner at the **Awareness** level:

- Will show a response, which may have no clear intent or objective in his or her learning. They will show pleasure, displeasure and state of being through movement, vocalisations, and alternative augmentative communication (AAC) device
- Is at the pre-intentional stage and is anticipated to be using pre-symbolic communication

A learner at the **Recognition** level:

- Demonstrates purposeful, intentional learning through movements, vocalisations and alternative augmentative communication (AAC) devices
- Is anticipated to be at the intentional stage consolidating pre-symbolic communication

A learner at the **Making Connections** level:

- Demonstrates more meaning by drawing on their prior knowledge and experiences through movements, vocalisations and AAC devices
- Is at the intentional stage and is anticipated to be using symbolic communication

A learner at the **Practice** level:

- Is engaged in an activity for the purpose of consolidating the skill
- Is at the intentional stage and is anticipated to be using symbolic communication

A learner at the **Transference** level:

- Demonstrate the ability to transfer learning in one context to another that share similar characteristics
- Is at the intentional stage and is anticipated to be using symbolic communication
A learner at the **Functional** level:
- Will be able to relate learning experience to the real world
- Is at the intentional stage and is anticipated to be using symbolic communication

A learner at the **Independent** level:
- Demonstrates that they are capable of working without guidance
- May show responsibility for thinking and learning for themselves
- Able to make sense of the literacy in their environment
- Is at the intentional stage and is anticipated to be using symbolic communication

### 2. Literacy Domains

Every learner has varying capabilities for learning of literacy. The LitCon Special has been divided into the four domains of literacy
- Reading and Viewing
- Writing
- Listening and Understanding
- Speaking

With every learner having varying capabilities for learning, the LitCon Special can demonstrate progress across some or all of these domains.

The LitCon Special has further defined each of the four domains into key areas.

**Reading and Viewing**
- Print Recognition
- Phonological Awareness and Phonics
- Comprehension
- Visual Literacy

**Writing**
- Print Knowledge
- Conventions
- Comprehension

**Listening and Understanding**
- Joint attention/Following Instructions
- Responding to Questions
- Vocabulary and Concepts

**Speaking**
- Vocabulary and Concepts
- Taking Part in Conversations
- Grammatical and Sentence Structure
- Oral Recount and Narrative

### 3. Negotiated Education Plan (NEP)

The LitCon Special is linked to the learner’s NEP
- The NEP is a structured plan to help educators, families and learners to jointly develop appropriate curriculum based on the ACARA Framework. It supports access, participation and achievement in the curriculum for students with disabilities. The parent/caregiver, relevant support services and the school, work together to develop an appropriate curriculum.
- If a student has a disability, as described by the 2007 DECD Eligibility Criteria (Intellectual, Global Developmental Delay, Speech and/or Language, Vision, Hearing, Physical, Autistic Disorder / Asperger Disorder), the school will develop and implement a NEP. This plan sets out the background information, strengths and needs of the student and the learning goals. Parents/caregivers should be involved in negotiating the plan.
- The NEP is part of school reporting and recording and should be regularly reviewed as part of this process.

### 4. Reporting

The LitCon Special is linked to the learners Reporting Format and is directly linked to the learners NEP
- The purpose of reporting is to support teaching and learning by providing feedback to learners, families and teachers. The learners' learning achievements and progress are also reported to other schools and to employers. This information about learners' achievements is valuable for school and system wide planning and reporting.
- Reporting involves a professional judgment made on a body of evidence about a learner's progress and achievement against the ACARA framework. It provides parents with a progress point along this framework as well as a statement of achievement that indicates whether progress is at the expected level, above or below it.

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The Better Pathways Pilot Project was initiated in 2009 by the South Australian Social Inclusion Board to improve engagement, transition, and post-school outcomes for young people with disabilities and mental health issues. The Project aligns with National Disability Strategy priority Learning and skills, and South Australia’s Strategic Plan priorities: Our Community, and Our Prosperity. The project is informed by concepts that underpin Strong voices: A Blueprint to Enhance Life and Claim the Rights of People with a disability in South Australia (2012-2020). Currently funded to December 2013, Better Pathways is a subject of Strong Voice’s Recommendation 9: that the program must be continued.

This cross-schooling sector and agency initiative involves 18 schools in three designated low SES council areas, and aims to register 500 young people in the Better Pathways Program by December 2013.

The Better Pathways Service Approach:

- provides the young person with ‘someone’ who can support them in achieving their transition plan to the end of one year post-school
- aims to involve parents/carers in transition planning
- mandates service collaboration between schools, disability and health services, and further education and training agencies with extra effort and longer lead times being granted to young people with special needs
- brings service providers together to:
  - assist young people with disabilities to develop realistic plans for their life after school (incorporating assessments of their capacity to learn)
  - bridge service supports between agencies and sectors, and fill service gaps
  - identify and resolve key transition issues around individuals and connect them to the appropriate aspirational pathways.

The current interim evaluation of the Better Pathways Pilot project has found that:

- 283 students are registered in the program. Of those allocated Pathways workers by 30 April 2012, 86% were considered to be ‘actively engaged’.
- 15.2% of these students have an ATSI background.
- While very few Better Pathways participants have achieved post-school status (the 2009 cohort is in year 12 in 2012), and many students have fairly recently engaged with the program, there is agreement that students are generally on track to achieve their learning/transition plans.
- Pathways Workers are currently working with 74% of students’ parents/or carers: 49% are actively involved in transition planning.
- School, agency and service provider project stakeholders strongly support the continuation of the program.


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FURTHER READING….AVAILABLE FROM SERU

The Road Ahead: Transition to Adult Life for Persons with Disabilities 2nd Ed. Training Resource Network. 2008. 45.0136.01
As the title implies, this resource is to help students with disabilities make the transition from school into adult life and how to make that life a meaningful one.

Skills for Work : Book 1 Ready For Work. Vize, A. 2004. 45.0125.01
Skills For Work is a series of four books that provide teachers with a practical resource designed to help them teach young people making transition from school either into a training setting or directly into the workforce. The books focus in the key competencies needed by young people to function effectively in today’s world, with a particular emphasis on literacy and language skills.

Work Experience: A Job Well Done. Dept of Education & Training Victoria. 2004. 45.0130.01
This CD Rom, details an occupational health and safety programme for secondary school students with disabilities or impairments undertaking work experience.

The Essential Skills for Living Series—Job Applications. Garner, J. 2005. 66.1465.01
This title is designed to give secondary students practice in the skills needed when interpreting and writing a job application. Numeracy and literacy skills are targeted. This resource is designed for students who need extra support with literacy and numeracy.

Beyond Expectations DVD. TAFE NSW. 2010. 45.0135.01
This sub titled DVD produced by TAFE NSW Disability Programs Unit, depict a number of adults with various disabilities involved in a range of jobs.
MY JOURNEY INTO ‘MINDUP’ (FOCUSSED CLASSROOMS, MINDFUL LEARNING, RESILIENT STUDENTS)

During my career in education I taught art to secondary students for 20 years, prior to becoming a counsellor, first in a secondary school and now at primary level. Recognising that young people and their families need support to heal, recognise their strengths, take action to grow healthy brains and form meaningful relationships, I work within teams of people that wrap around the child. The team often includes: parents, caregivers, grandparents, teachers, leadership staff, child specialists and support personnel (for example child psychologists, CAMHS, counsellors, GPs and local regional staff).

Through my experience in schools I have become aware of developmental trauma and its impact on learning and wellbeing, and so have come to focus on the development of healthy brains and positive, healing relationships as the primary goal that leads to improved learning at school. I have come to understand that these can be taught and trauma-informed teaching has become a large part of my work with students. With an understanding of the value of visual arts it is interesting to reflect on my journey from supporting young people to express their thoughts and feelings through their art work, to more recently working as a member of a team to support students to live a happier life both at school and with their families.

To strengthen and complement this learning I have had experience with two young family members diagnosed with autism, who have both attended main stream schools. I am trained in a Structured Program for Early Childhood Therapists working with Autism (SPECTRA) and have spent some time using this with a young family member. I acknowledge that similarities can exist between autism and developmental trauma.

Three years ago I ‘popped’ a number of discs in my back and the process of recovery has led me to understand more about my brain and integrate this practice into my work with young people. I found the way I ’counsellled’ students changed after I had completed a ‘pain clinic’ and experienced the difference understanding ourselves can make. I learned that we often respond to life in ways that are patterned. When we are not being mindful to our thoughts, feelings and responses we go on ‘autopilot.’ I was taught how to understand my ‘pattern’, transform it through conscious awareness of how I wanted to feel and act, then set about doing that in small, practical, achievable steps. I trialled this and was able to remain relatively pain free most of the time by using this method of being ‘mindful’ and being in the moment.

I wondered how my learned experience with mindfulness and brain theory could be integrated in my counselling and behaviour development work with young people and their teachers. I wanted to develop visual diagrams and resources to help young people understand their neural processes and pathways to better understand their feelings and reactions to experiences. I developed ’brain sketches' that showed my students that we all react in patterned ways that can come to be identified with us as a person. I explained that when one domino falls in the neural pathway the rest can follow. Students could see, understand and reflect for themselves what their patterned responses looked like. The conversations with students and parents around behaviour management changed dramatically as we began to understand the potential for behaviour development through practical, mindful activities. Positive behaviour changes occurred. Progress was quicker than I expected and exciting for the children. Our School Behaviour Management data changed dramatically for those students with whom we worked intensively as they became more in control of their behavioural responses.

As counsellor at Goolwa Primary School I have had the opportunity to work with the staff and students through the preventative and developmental counselling model to effect whole school change. I initially phased in the Friendly Schools and Families program throughout the whole school, with Unit 1 being taught in the first two weeks of the school year. This year, 2012, I combined the Friendly Schools and Families curriculum with the Keeping Safe: Child Protection Curriculum, integrating the curriculum content to develop a comprehensive social and emotional learning program. When I sought advice from a policy advisor*, with regard to doing this, she encouraged us to continue with the work and to consider a program called ‘MindUP’.

After reviewing MindUP, I saw that the program connected my prior knowledge of brain development, neuroscience, neuroplasticity (how the brain can change itself) and mindfulness. I was excited that this program built onto the small start I had made with my students by offering a deeper, richer and visually stimulating 15 lesson program that taught them about themselves and their reactions using practical learning activities.

We planned to phase in MindUP in a similar way as we had implemented the Friendly Schools and Families program, starting slowly and then developing the program across the school. I initially invited two staff members who I believed would be open to new ideas and who had a number of students in their class whom we thought would benefit from the program.

continued
With the changes seen in these two classes, interest soon spread as others could see evidence of how exceptionally the program had been received and the positive outcomes it had for students. I now teach the program, alongside the classroom teacher, with six classes, Years 2 to 7. We have integrated this into the health and personal development curriculum. The class teacher’s commitment is integral, as they continue teaching and reinforcing the skills of belly breathing and active listening a number of times throughout each day.

I believe MindUP can benefit all students, including those who may have been impacted by developmental trauma and students with special needs. The program adds practical guidance for teachers in implementing the learning about the neurobiology of trauma presented in the DECD/ Australian Childhood Foundation SMART Program. For example, trauma can lead to developmental delays, sensory overload, hypersensitivity to surroundings, emotional over (or under) reaction, frustrations, demanding behaviours, bully/victim mentality, hyper vigilance, egocentricity etc. The MindUP course teaches us how to teach children and young people how to calm themselves. In giving our students the ability to be in charge of their reactions to their feelings we are moderating the intensity of the feelings and reducing the time taken to go from ‘overwhelmed’ to ‘calm and thinking again.’

The rewards and benefits for young people who have the capacity to learn these skills are enormous: reduced anxiety, increased concentration, increased time for learning and more positive relationships with their peers, families and teachers. Teachers get the bonus of these improved relationships and there is less stress for all.

In the small-scale trial so far we have noted that students are changing; they are more in control and in charge of their reactions. Following are some quotes from them about what they have learnt from ‘MindUP’:

- ‘I deal with stuff differently, I calm down now’
- ‘I am starting to get better at controlling myself’
- ‘It’s changed how I think when I’m stressed or angry’
- ‘The most interesting thing that I’ve learnt about is that your amygdala is smaller that a peanut and it makes you go ‘bonkers’
- ‘Your brain can recreate a drug (Dopamine) that can make you happy without having to buy a drug to make you happy’
- ‘The course has made me feel I am responsible when I’m stressed and I can now distract myself without losing my temper’
- ‘Knowing that I’m more in control of myself I will learn more’

That is the hope for us too …. the more we know of ourselves, the more we are in control of ourselves, the more we will learn…

* advice sought from DECD Aboriginal, Student and Family Services, Child and Student Wellbeing policy advisor.

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Friendly Schools & Families & Keeping Safe by the Child Heath promotion research unit and Edith Cowan University http://www.friendlyschools.com.au/about.php/

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FURTHER READING….AVAILABLE FROM SERU

The Wrong Stone & A Pocket of Stones. Deal, R. 2004. 66.1043.01
This pack contains a picture book with coloured illustrations providing visual cues to the text. The story relates what happens when a wall is built using only perfect stones. It humorously shows what it is like to be different, to stand out, to feel unwanted and that the wrong stone knows.

Growing Good Kids 28 Activities to Enhance Self Awareness, Compassion and Leadership, Delisle, D & J. 1996. 66.1129.01
This book, containing blackline masters, provides 28 activities designed to build student skills in regard to self awareness, compassion and leadership. The activities provide practice in problem solving, decision making, goal setting, divergent thinking, tolerance, patience, compassion and communication.

The Kindness Curriculum Introducing Young Children to Loving Values. Rice, J. 2008. 66.1161.01
The activities of the Kindness Curriculum are organized into eight main topics, each involving and area of character development. Learners are introduced to the concepts of unselfishness, understanding and valuing themselves and others.

Fair Go! Learning About Tolerance and Empathy in the Middle Years. Johnston, s. 2002. 66.1128.01
This resource is designed to encourage exploration around the ideas of tolerance and empathy. Comprehensive teaching notes activities and photocopiable worksheets, accompany a story line about a space creature who finds being different can be very difficult.

continued
SCHOOL READINESS: STARTS AT THREE YEARS

Starting school evokes images of excitement about wearing the uniform, making new friends and learning to read and write. Parents often falsely believe that children need to have established skills of writing their name, counting to 20, knowing their colours and a myriad of other ‘academic’ skills. But few parents give thought to the array of other building blocks needed that, with support and encouragement, develop in the years preceding school entry.

These foundation skills are essential to ensure that children are ‘set up for success’ in the transition to the school environment and the learning demands (academic, social, emotional, physical) of the school environment. These skills are even more important where the child has some learning challenges be they social, emotional or other, and especially those that are more sensitive so that the entry to unfamiliar environments, routines and expectations must be a success.

What are the foundation skills for school entry?

One view is that there are 5 main areas of foundation skills:

- **physical skills** (such as muscle skills for playground play and sitting upright at a table/ mat time, endurance to last the school day, and finger skills for successfully holding a pencil or scissors)
- **social skills** (for play and peer interaction including ‘waiting’ and using manners)
- **emotional skills** (knowing how to help yourself e.g. asking for help, having self confidence to risktake, knowing how to regulate your emotion and activity level, and recognizing emotions in self and others)
- **academic skills** (such as basic literacy, numeracy, attention and concentration)
- **executive Functioning** (overall planning, self and material management).

What is typically school readiness preparation?

Commonly, preparation for school start focuses on the new physical location and friends, including: school transition visits, school playground visits on the weekend, uniform dress-ups for family, and play dates with kids entering school at the same time. Whilst these are important, parents often overlook preparation for the new culture to which the children will be exposed and the demands of this new culture.

What would ideal school readiness focus on?

The most significant culture change in school entry is the shift from guided exploration (or play) at kindergarten to facilitated (and often explicit) learning.

Where kindergarten develops the foundation skills for learning, school demands the application of these skills. In essence, the change is one from child-centred play to adult-directed structured learning.

With the increase in the staff to student ratio, the need for children to self-manage their body and belongings is very significant. As a result, the need to independently: blow their nose, toilet, dress, eat (including opening lunchboxes and food bags), open and close backpacks, and identify and keep track of personal items is clear.

**Thinking for themselves!**

However, the single biggest difference in the culture of the transition from kindergarten to school is the need for children to independently think for themselves. In some circles this is known as Executive Functioning. That is, functioning as a high level executive who must oversee and ‘shift’ between a wide range of tasks, collate materials and details (whilst ignoring or not paying attention to information that is irrelevant in that moment/task), and plan and sequence the delivery of the right information to the right person at the right time. This ability allows the child to pay attention to only the relevant information in the moment, to independently begin a task, to develop strategies on how to overcome a challenge when confronted, and to transfer skills from one setting/activity to another.

Yet in our ever increasingly busy world where we do more for, or narrow the tasks required of children due to limited time and resources, children are given less and less opportunity to develop effective executive functioning. As adults, we even model less executive functioning to children by buying pre-packaged foods, giving them Lego boxes that make only one specific toy which prevents lateral thinking, providing pre-cut shapes for cut and paste activities, using IPADs in place of real objects (e.g. puzzles, block and train track construction), and even keeping ‘to do’ lists and diaries in our smart phones instead of hard copy that children can see.

**So what can parents and teacher do to help develop school readiness?**

Simple executive function begins even before Kindergarten with building a tower of blocks, learning how to wipe your nose and pulling your shoes off. More complex skills that emerge at Kindergarten can include: climbing over A-Frames, cutting, gluing and taping cardboard box constructions and mastering independent toileting/dressing/utensil use. Upon school entry, more complex tasks again develop including: letter formation, spelling, cut, paste and draw and maths worksheets (e.g. □, o, Δ, □, and o… what comes next?).
Preparation at home can include: setting the table, developing independence in all self care tasks (e.g. dressing, nose blowing, toileting), packing bags for a visit to grandma’s, Lego construction to replicate a model where more pieces than necessary are provided and encouragement to attempt independently problem solving.

Preparation At Kindergarten can include: fostering attention to persisting with a task to overcome a challenge, appropriately shifting between tasks when asked (not getting ‘stuck’ on one), reminders about what information to pay attention to (e.g. teachers voice at mat time, not the garbage truck outside) will be helpful.

So why focus on school readiness so long before school entry?
Simple. When the foundation building blocks for learning are in place, children develop and retain new skills easily, negating the need to individually teach each skill. Ultimately, spending time developing the building blocks to learning supports an easy transition into school, the ability to meet the new culture and it demands with ease and comfort, and allows teachers to get on with teaching school skills rather than helping children develop the ability to learn.

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**FURTHER READING….AVAILABLE FROM SERU**

This toilet training package is designed to assist parents/carers working with adults/children with intellectual disability through the process of toilet training.

Arnie and his School Tools - Simple sensory solutions that Build Success. Veenendall, J. 2008. 60.1122.01
This story book will help children and adults understand sensory processing difficulties. It describes a range of tools that can be used to help calm children so they are ready to learn.

Interactive Storybooks - Let’s Get Ready for School. Breakstone, B. 2007. 63.3192.02
This interactive storybook provides a multisensory, early literacy learning experience using a communication board and story pieces that attach to the storyboard.

I’m Going To School. Tullemans, A. 2008.. 66.1378.01
This workbook, designed for learners who are beginning pre-school or school, is designed for the learner to create a visual guide in preparation for their first steps into a new environment,

Functional Vocabulary for Children - Kira Likes to go to School. Reeve, C. 2005. 61.0930.01
In this book, the text of the story can be read and then the learners select the appropriate photograph to match the photograph on the corresponding page. The repetitive sentences throughout the story can be recorded on voice output communication devices to allow non verbal learners to participate.

Each page of this book shows a coloured photograph depicting experiences a child would be likely to have at preschool. The word for the experience is shown below the photo and above it, a graphic with a written explanation of how to sign the word in Auslan, is shown.

This DVD, hosted by a young boy who narrates each scene, features early years learners demonstrating appropriate social skills in the classroom, library, playgroup and hallway. Each scene lasts between 30 seconds and three minutes depending on the chapter and at the conclusion, each chapter has a storyboard summarising the rules taught.
About the Voice

This preconference full day workshop enabled participants to explore a range of considerations in the use of voice technologies on a computer or tablet. A number of in-depth articles can be downloaded from [http://www.spectronicsinoz.com/blog/author/gerry/](http://www.spectronicsinoz.com/blog/author/gerry/). These include:

- Universal Access to Text to Speech
- Universal Access to Text to Audio
- Universal Access to Speech Recognition
- Universal Access to Text – Literacy Support for ESL Students
- Universal Access using OCR with Printed Text

This article describes in depth a newly available free resource that utilises speech technologies.

**SpeakComputer** - Text to Speech

SpeakComputer is a very flexible and versatile MS Windows software program as it offers useful and practical features. Different aspects and functions cater to and benefit a wide range of potential users. It is quite different to anything else on the market. It will prove to be attractive to schools, TAFEs and Universities as well as to neighbourhood houses and day training centres. The program is ideal for students who require text to speech for proof reading, editing, keeping organised and for reading difficult or challenging text – in any program.

It has six different tools all available from within a floating toolbar. This conforms well to the principles of universal access and design. After it is downloaded and installed onto an MS Windows Vista or 7 computers, it appears as a shortcut on the desktop.

SpeakComputer is a free text to speech program available from [www.speakcomputers.com/SpeakComputer.aspx](http://www.speakcomputers.com/SpeakComputer.aspx) SpeakComputer comprises of six (6) TTS readers as well as a Parental Control Guard.

SpeakComputer supports natural sounding text to speech voices including Cepstral and Ivona voices. These are at extra cost. Most individual voices start at about $30 each. If other compatible voices are installed onto the host computer, SpeakComputer will locate and offer them in the various menu options.

About the Program

SpeakComputer text to speech software is a suite of useful text to speech text readers. The software is comprised of six separate text to speech readers as well as a parental control package. The Text to Speech reader is a powerful software reader that supports text to MP3 export as well as to Wav export. Users can select their own writing or other text easily and intuitively. Then they can listen to their selected sentence, paragraph or page on other computers, USB music players, digital voice recorders (DVR) as well as from a variety of other hand held devices, Smartphones or iPads (having converted to file format first to MPEG4).

The easy to use user interface allows users to:

- Change different pre-installed TTS voices
- Change the speed at which the text to speech reader voices the text
- Users can also elect to have the "Echo Keys" feature where the Text to Speech reader echoes most keys that are pressed while users are typing.

The Text to Speech Reader is a multiple document interface design. Users are able to open many supported files within the same application. Basic document formatting is supported.

The interface is well designed and the program can be run in a window or in full screen mode. Editing shortcuts are readily displayed and available in the toolbar and users can also elect to add key functions in the Quick Toolbar. It has support for various voices and reads aloud entire documents or selected passages of text.

Other features include:

- TTS Voice speed adjustment
- Export option to both Mp3 and WAV file formats
- TTS Keyboard echoing
- Tabbed document interface
- Opens and saves files including Text (txt) or Rich Text (or RTF) files

*continued*
Basic document formatting
Advanced Text to Speech context menu
Basic built-in English, Spanish, German and French spell checkers
Can be control by the Text to Speech Parental Controls program
Document zoom feature
Visual Interface Themes

The **Mini Speaker** will read the text aloud in a male or female voice, at a user defined speed. The Mini Speaker also supports text to MP3 export. The **Mini Speaker** is an intuitive Text to Speech tool that voices any selected text from any application. Users need only open an application or web page, select the text they require to be spoken and click “Control + C” (or Edit command in the application).

The voice speed and different voices are available in the toolbar (it drops down to reveal these functions).

The **Text to Speech Web Browser** enables users to quickly and easily read the web pages by selecting text on the web page and clicking the “Speak” option. The web browser supports exporting text to MP3 and text to WAV which is ideal when saving text as audio from eBook sites, web pages, research data, online atlases and encyclopaedias. It is a definite strength of the program.

TTS voice speed adjustment is supported as well as selecting different voices that are pre-installed on a user’s MS Windows computer (Note: No MAC OS version is available). Standard zoom features are also supported.

Features include:

- Support for various TTS Voices.
- It voices entire web page documents or only the selected text within a web page with TTS Voice speed adjustment.
- Users can export any selected text to Mp3 and WAV files.
- It has a tabbed document interface.
- Saves files as HTM, HTML, MHT or Text files.

- It has access to a user’s Internet Explorers Favourites (Read Only) and can be controlled by the Text to Speech Parental Controls program
- It importantly has a number of visual Interface Themes

Another favourite is the **Speech Clock**. It starts automatically after the software is installed. The Speech Clock greets with the user name (a default setting that can be easily modified) whenever I start Windows is started and log in.

The TTS Clock also announces the current time with the time zone being set automatically. As with all six functions, the voice can be selected or changed at any time. Time frames and intervals can be modified by the user. This will prove to be advantageous in classrooms or for users who need to adhere to strict regimes and timetables.

The **Text to Speech Image Presentation software** offers great scope. An educator or student can add an image, a pre-recorded sound and if required, some text. The application provides other options as well (presentation time and delay between images). It is quick to learn and easy to master. The resulting file can be saved and run as a slideshow.

Multiple images can be added to a presentation each with their own associated sound file or sound effect or narration!
This provides a very fast way of creating suitable resources for children who wish to present their drawings (scanned), paint or drawing files (from TuxPaint, MS Paint or KidPix) or a mix of photographs taken on iPads or digital cameras (such as Sony Bloggie or Flip Cameras). For creating and generating differentiated curriculum, it is a bonus function.

The Appointment Reminders is a basic implementation of short and long term appointment software that can uses TTS built-in features to read out alerts. This will cater directly to students who have executive functioning needs that need to schedule events and appointments and hear the notifications. They take place and are voiced when an appointment is pending or due.

The TTS Guard is a parental control feature that works with the Text to Speech Reader, Web Browser and Mini Speaker applications. When activated and turned on, the text to speech facility will read replacement words or simply skip the word that is to be read to the student or user. Key words can be added as exclusions (swear words, slang, inappropriate words or text that is offensive). This is a very worthwhile feature and one that educators will applaud. Features include:

- Text to Speech word exclusion
- Text to Speech replacement words

SpeakComputer Text to Speech History

SpeakComputer Text to Speech software was initially developed for a private languages academy and was so successful with helping students learn English that it was voted unanimously by the owners to give licensed versions of the software away to anyone who requires it, at no cost.

- MS Windows Vista and Windows 7 - all requirements are pre-installed
- If used with MS Windows XP: .Net Framework 3.0. or higher is required
- Hardware, sound card, internal or external speakers earpiece, headphones or headset for sound output

Simply download, unzip the file and run then run the setup.exe file from http://www.speakcomputers.com. Then follow all of the prompts. It is a quick and hassle free install. It is a 12.1MB zipped file.

Note: In some schools and centres, the user may require administrator access name and password in order to install the program.

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EduApps

www.eduapps.org

For a number of years, SERU has made the AccessApps suite of free, portable software available for purchase on a pre-loaded flash drive. This service is continuing for clients requiring the convenience of a fully functional, ready to use flash drive. However, it is worth reminding our readers that AccessApps is just one of eight different collections of free and portable software. The EduApps collection of software suites includes: AccessApps, TeachApps, LearnApps, MyStudybar, MyVisBar, MyAccess, Create & Convert, and the Accessible Formatting Wordbar.

Each of these collections has been designed to cater for a range of teaching and learning needs. Any of the EduApps family collection can be downloaded from www.eduapps.org. The web site also has useful screencasts to assist with the downloading and flash drive setup process for these software suites.
CREATING ACCESSIBLE BOOKS ON THE iPAD

This article provides information gathered from two Special Education Expo workshops that focused on using the iPad to create and distribute ePub books.

OVERVIEW

There are many Apps available to create digital books on an iPad. However, most will not provide the range of accessibility options that are available with an ePub format that can be read in iBooks. The iBooks app provides the accessibility tools for users to interact with ePub content on an iPad. This includes the use VoiceOver which provides access for users who have a Vision Impairment or who are blind, the ability to speak aloud selected text with the iPad’s text to speech engine and the ability to play back captioned video content.

This article will give an overview of two Apps which can be used to create accessible ePub content. The generated content also complies with Apple’s accessibility standards and can be distributed in a number of ways; including distribution through the iTunes Book Store.

BOOK CREATOR FOR iPAD

This App is one of the most popular apps used by educators around the world for the creation of eBooks. Once compiled, all the content in the project is generated as an ePub format book in a fixed layout. This fixed layout format can still utilize some accessibility feature of iBooks including speaking selected text. However, it is important to note that a fixed layout of text is not fully supported with all of the accessibility features of iBooks. The iBooks’ bookmarking, highlighting and note taking features are also not available within books made with Book Creator. Text can only be enlarged by zooming in with the pinching method.

This app is ideally suited to educators and students wishing to create a book containing a range of multimedia elements to support the text. Content creators can:

- Choose to create portrait, landscape or square books
- Access over 50 font types and apply rich formatting
- Import images from a number of sources
- Import audio files from the device’s iTunes library*
- Import video from the Photo library
- Insert voice recordings*
- Set contrasting colours for page and text box backgrounds and fonts

At the tap of a button, Book Creator generates an ePub version of the book which almost instantly appears on the bookshelf of iBooks. The book can be distributed via iTunes, email, Dropbox or a WebDav server. A book can also be exported as a PDF for printing purposes.

The screenshot below shows how a yellow background can be set for better contrast with the text. Voice recordings of each paragraph of text have also been created.

The screenshot below shows how a number of voice recordings have been created to provide more detailed audio information for various aspects of the Mindmap.

continued
The screenshot below shows a sample page from ‘Tracks in the Sand’ by Loreen Leedy. This children’s author used Book Creator for iPad to create and publish her picture book. The book was uploaded to the iTunes Book Store for distribution.

CREATIVE BOOK BUILDER

Creative Book Builder is a sophisticated app for the creation of ePub books. It has a large range of features which allows content creators to:

- Add a range of text elements including titles, paragraphs, html
- Utilise 6 font types and apply rich formatting including hyperlinks
- Add media elements such as images, video, voice recordings and music
- Import audio files from the device’s iTunes library*
- Import files from Dropbox, Google Drive
- Create links to the web, email, sms, telephone
- Add other elements including tables, multiple choice questions, equations (LaTex markup), QR Codes, lists, page breaks, YouTube video links
- Create a glossary section which can include any of the elements described above
- Embed PDF, Doc, Xls, Ppt, Keynote or Numbers files
- Import PDFs as images
- Create internal links to chapters or glossary terms
- Create unlimited number of chapters and organise these in to sections
- Copy and merge books
- Customise the book information including author, title, description and subject

The format of the book is in EPUB format that includes HTML, JavaScript, css, jpg, mp4, m4a, mp3 and caf. Books can also be exported as pdf for printing purposes. The app generates the books with reflowing text. Reflowing text versions of ePub books allows the reader to enlarge the text to any size within a set page size. It also allows the reader to utilise the iBooks features of bookmarking, highlighting and note taking.

The extensive features available in Creative BookBuilder give educators the opportunity to build reading comprehension supports in to curriculum content they create. The screenshots below show how the multiple choice element can be used to create an Anticipation Guide at the beginning of the book as a pre-reading activity.

*Audio files and voice recordings can be layered on to an image and made invisible when viewed in iBooks. This feature allows readers to tap on images and hear accompanying audio. This can be in the form of sound effects, background music or a recording of an image description.

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The Tap Speak iOS apps collection, Tap Speak Button, Tap Speak Sequence and Tap Speak Choice (TSC), have been created by Conley Solutions resulting in communication applications that can be used on mobile technologies such as the iPhone, iPod and iPad. Tap Speak Button works like a Big Mac, delivering a single message per touch. Tap Speak Sequence works like a step by step switch allowing the recording of a sequence of messages to relay information. TSC functions as a speech generation device and as a communication board player. There are other competitively priced communication applications available for use on the iPad, however the reasons TSC was chosen for a specific student was primarily due to its auditory scanning features and switch support. TSC is also one of the only applications to use Dynovox/Mayer Johnson Picture Communication Symbols (PCS).

We first started using TSC in version 2. In May 2012 the app was updated to version 3 and the developers have fixed some of the issues and bugs from the previous version. TSC works on two layers. The Library layer is where collections of symbols are grouped by common attributes e.g. core vocabulary, nouns, verbs, mealtime words etc. When TSC is first downloaded it comes with a set of ready to use libraries. These libraries can be personalised for the user with images and vocabulary they recognise which are then used to create the boards/pages. The second layer is the Boards/Pages which is where the user accesses the device. Boards and Pages are used as an interchangeable term throughout the user guide but we will refer to it as the Board layer from now on.

For the purposes of the Special Education Expo Presentation we decided to teach the attendees how to use TSC based on the Olympics theme, by participating in three activities:

1. Setting up a Sports library
2. Creating 2 Olympic boards
3. Linking boards to each other and a home board

Activity 1: Setting up libraries

For every board that needs to be created there must first be a library of related buttons. To create the library tap the library symbol twice (filing cabinet at top middle left of iPad screen) and then tap on the plus sign to add the library. Enter the name of the library, in this case Sports. A blank library will appear with the title you have set.

Tapping the plus sign in the top iPad bar adds buttons to your library. A touch and hold of the button when it appears allows you to edit how it looks and what it says. Alternatively the eye icon doubles as the image editor and the microphone icon doubles as the speech editor.

It is best to add images to the button first and then assign speech functions. To add an image choose between shape, photo, PCS and text. For the purposes of creating a sports library we will add PCS symbols and a photo. Tap image editor and then PCS. Type in the names of the sports e.g. Athletics, Hockey, Basketball, Boxing, Swimming, Tennis and Rowing.

As each sport is typed in a PCS will appear at the bottom of the pop up. When the picture is touched it appears on your button with the associated title. In the case of Rowing, the closest PCS is a Rowing Boat. The name can be changed within speech editor by deleting Boat from the title.

Using the camera on the iPad to take a photo, everyone added their own photo from the camera roll to a button, labelling it “winner”.

Finally a cheerleader button was added which we changed to Aussie, Aussie, Aussie, oi, oi, oi! The speech editor button was used to change the title and then our own cheering voice was recorded by pressing and holding down the record button. The green play message button allows you to listen to your recorded message giving immediate feedback. This feature allows your own voice to be added to buttons for clearer pronunciation. Note the buttons will reorder themselves in alphabetical order.

continued
Activity 2: Creating 2 Olympic Boards

To create a board tap twice on the book symbol in the top left corner then tap on the plus sign to add a board.

Give the board a title and dimensions (number of buttons Dynamic 56). I choose Dynamic 56 as it is the most flexible option that automatically resizes buttons to the largest size that will fit on a board and builds in scope for the user to progress to up to 56 buttons.

Leave the folder as the root folder, modifiable on and home board off. You can change the background colour to suit the needs of the user. A blank board will appear with the title you have set. In this case “Olympics”.

While on the blank Olympics board, select the library picker (rectangle symbol on the right of the filing cabinet). The sports library you prepared earlier will appear on the library picker drop down band across the top of your board. Swipe left or right to navigate the library buttons which will appear in alphabetical order.

Add four sports buttons of choice to the Olympics Board. When adding second and subsequent buttons you must hold and drag the button image from the picker and hover over another button on the board then let go (see picture of hockey button being held over basketball button).

Create a second board and title it Olympics 2. Add four different sports buttons to this board in the same way as for the Olympics Board.

Your board cannot be edited while in play mode. To move and delete buttons enter edit mode. Tap directly on the board title and hold to enter edit mode.

You will see delete icons on every button while in edit mode and the background will turn grey. To rearrange the order of the buttons, hold, drag and hover the button over the desired position. Unlike libraries you are able to set the order of buttons. Tap, and hold the board title to enter and exit edit mode. Alternatively the pen and arrow icons to switch between modes can be used.

Activity 3: Linking boards to each other and a home board

When TSC is opened, the first board it opens is the home board. Only one home page can be set. In this final activity the Olympics and Olympics 2 boards are linked to each other and a home board. This allows easy navigation between boards eliminating the need to go back to the board icon to find the desired board.

To set a home board tap the book icon and select the board you would like as the home board. Next go to libraries and select the Navigation library. You will notice that navigation folders called Olympics and Olympics 2 exist in your navigation library. These folders are automatically entered by the Tap Speak Choice application into the navigation library for every board you create.

Open the home board and select the library picker. Drag the Olympics folder button into the far right hand corner of your home board. Tap the Olympics folder button to navigate to the Olympics board.
While on the Olympics board, go to the library picker and add the Olympics 2 button and home button to the Olympics board.

In the same way tap the Olympics 2 button to navigate to the Olympics 2 Board. Go to the library picker and add the Olympics and home buttons to the Olympics 2 Board.

Navigation has now been set up both between the two Olympics Boards and the Home Board.

Navigation between layers is done using the board, library and library picker symbols or with vertical swipes of a finger. Starting from the page layer, swiping up reveals the library layer, and swiping down from the library layer reveals the page layer. (Note: Using the symbols is more reliable than swiping.)

Other Setting Options

The settings options can be found by tapping the cog symbol at the upper right of the page. You can choose the scan settings to the needs of the user. Choices include: Direct Select using the iPad, 1 Switch Auto using the iPad, 1 Switch Auto using a switch interface and 2 Switch Auto or 2 Switch Set up using 2 Switches. Tap Speak Choice is compatible with the RJ Cooper iPad cordless super switch, the Ablenet Blue 2 switch and APPlicator switch, however it is best to check the internet for the most current information. You can also choose the scanning order, scan speed, button pop duration and number of scan cycles.

Touch and Tap configurations can also be customised to allow for movement and duration of the users tap or touch.

Tap Speak Choice supports 20 text to speech languages and 43 voices. There are four available voices under British English, five under US English and no Australian English Voices as yet. Once the voices have been downloaded, the rate and volume are able to be adjusted.

The message window and scan feedback can be toggled on and off and play lock can be enabled to prevent the user from editing libraries and boards.

Back up and Restore

To back up and restore libraries and boards tap the exclamation mark at the top right of the iPad whilst in the TSC application. It is a good idea to back up the database every time any new information is added and to back up through iTunes to your computer as this allows sharing of files across devices. Photos and recordings can be included. I plan to share the TSC files I have created on one iPad across to a student’s iPad once they have access to their own device.

We recommend that you download the Tap Speak Choice User Guide from the website. As it is in PDF format you can save it into iBooks on your iPad for easy reference.


The following YouTube videos uploaded by Conley Solutions will guide you through various elements of Tap Speak Choice.

TapSpeak Choice 2.0 Create Your First Board http://www.youtube.com/watch?v=qnbTqvkOU7k
Tap Speak Choice Intro – unedited http://m.youtube.com/watch?v=Wl9LZW luX6y
Tap Speak Choice Layer Navigation http://www.youtube.com/watch?v=qPMUw6DArQ
Tap Speak Choice 2.0 Boards – Button Picker and Libraries http://www.youtube.com/watch?v=pYpsB-YQmAmg

Tap Speak Choice 2.0 Linking and navigation http://www.youtube.com/watch?v=JT1MllIZ0qTA
TapSpeak Choice 2.0 Scanning – Introduction http://www.youtube.com/watch?v=HKSZcAM8U
Tap Speak Choice 2.0 Scanning - Example http://www.youtube.com/watch?v=4-GnNoSsW1

Jane Farrall also has a website with valuable information relating to iPads and Apps, Augmentative Alternative Communication (AAC), Literacy and a Blog where you can find the most up to date information about the latest switches and emerging technologies. www.janefarrall.com

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This article is a combination of information from two hands-on workshops at the Special Education Expo that focussed on the built-in accessibility features of the Mac Operating System. It outlines the various built-in options on a MAC OS computer that enables users with different abilities to access their MAC OS computer.

The Universal Access Options are comprehensive and cover many different disability needs. A number of handy utilities and programs also provide equitable and easy access to the software on the computer and to the Internet.

Over and above these options and preferences are commercial and Freeware/Open Source programs that offer additional supports.

1. Locate and click on the Help Menu
2. Type in “Universal Access”
3. Select the About Universal Access Preferences

The following will appear.

- Turn on VoiceOver to hear descriptions of items on your computer screen and to use the keyboard in order to control your computer with voiced output for all icons, menus, dialogue boxes and text.
- Switch the screen to black on white or white on black and make other contrast enhancements.
- Zoom in on the screen image to make it appear larger.
- Make the screen flash when an alert occurs.
- Use the keyboard to perform mouse functions.
- Turn on Sticky Keys or Slow Keys to help you press multiple keys and display pressed keys on the screen.
- Turn on Mouse Keys to control the pointer using your numeric keypad.
- Enlarge the pointer to make it easier to see.

Voice Over

Voice Over provides full voice for all icons, menus and dialogue box text on the computer.

a. Click on the On radio button.
b. To customise, click on the ‘Open Voice Over Utility’.

Users can alter settings in a number of areas. The options include settings for voice over including – General, Verbosity, Navigation, Web, Sound, Visuals, Number Pad and Braille preferences.

In these areas, users can alter the sound quality and voice parameters as well the various contexts when using the MAC, so that they can fully customise voice to suit a user’s needs, visual acuity, abilities or skills. The auditory feedback enables people to hear what is going on as they work in many different combinations.
**Zoom:**

a. Click on the radio button to turn on the Zoom feature.
b. Click on the *Options* button to show the settings for zoom.

It is in this dialogue box where a user can set the *Zoom* magnification levels to a maximum and minimum level. He or she can also set keyboard equivalents (or shortcuts). Other settings enable them to configure the *Zoom* features to accommodate user's visual skills and preferences. Take time to explore this dialogue box and experiment for a while, turning features off and on. (Note: Turn on one feature at a time so that its impact will be obvious, rather than invoking two or three that may confuse the user)

**Display:**

In the Display preferences you can set the entire screen display to either Black on White (normal) or reverse it to White on Black. The display can also be set to Gray scale and the contrast can be customised from a minimum to a maximum level. There are keyboard equivalents for the settings as well in the main Universal Access dialogue box.

You can turn on the 'Enable Access for Assistive Devices' as well as opt to turn on the 'Show Universal Access Status' in the menu bar.

**Hearing**

This is where you can customise the computer for people who have a hearing loss, impairment or users who are deaf. You can elect to turn on a Flash function. It will cause the screen to flash when an alert sound is normally heard.

You can test the screen Flash, by clicking on the Flash Screen button. It will display the visual effect immediately.

To alter the sound effects and volumes for screen alerts, you click on Adjust Volume. In this new dialogue box you can alter a number of settings and change the volume and types of sound effects (including Blow, Bottle, Frog, Funk, Glass, Hero etc.).

The Alert Volume can be adjusted as can the Output Volume. These alerts are global and are used in all contexts and applications as well as in the operating system. The Flash Screen is used to assist hearing impaired and deaf users who cannot hear these auditory signals and alerts.

**Keyboard:**

The **Sticky Keys** function provides more accurate and timely access to the keyboard. It caters to users with physical disabilities who require multiple keystroke access (e.g. when pressing 2 or 3 keys together *Option-A* or *Ctrl-B*). It can be turned on and then activated at any time (or disabled) by pressing the *Shift* keys five (5) times in succession.

A 'Beep' sound can be set when a modifier key (i.e. *Shift*, *Option*, *Ctrl* and *Command*) keys is used. A visual support can also be used, with the keys that are pressed being displayed on screen.

The **Slow Keys** function introduces a delay between key presses. This assists the user who may press unwanted keys due to poor or approximated hand and finger movements due to tremor or conditions such as cerebral palsy. The delay allows the user to determine how long the keyboard buffer takes to accept correct and purposeful keystrokes, and therefore ignore unwanted ones.

The **Acceptance** delay can be set to long or short time delay. You can turn on a *click* sound to alert users that he or she has pressed a key.

The **Set Key Repeat** button brings up a new dialogue box that allows you to set the Key Repeat Delay and Delay until Repeat. These two functions provide...
A handy item is where the keyboard can be illuminated in low light conditions (or in the dark). You can also set a time for the computer to turn off the illumination if not used for 5 seconds, to never turn off. This is a handy feature for all users of any ability or visual functioning.

Mouse and Trackpad
In this dialogue box, you configure the performance and functionality of your Apple or other mouse or trackpad on your MAC.

Mouse Keys can be turned on or off. This is where the keyboard keys are used to control the mouse. You can also turn Mouse Keys on or off by pressing the Option key five (5) times.

The initial delay can be set from short to long. The Maximum speed can also be set from slow to fast. The trackpad can be totally ignored (or disabled) when Mouse Keys is turned on.

The cursor size can be adjusted and resized from normal to large. The large size does distort the pointer icon(s) though. You can opt to open the Keyboard Preferences here as well.

Note: some dialogue boxes and options within them may differ, depending upon the MAC OS X operating system version that you may be using. Refer to http://www.apple.com/accessibility/macosx/vision.html. ATMac.org is also a useful site dedicated to providing reviews, how-tos, and other resources for Mac users with disabilities, chronic illness, or other impairments. Two excellent sites for Freeware and Open source programs are http://www.freemacware.com/ and www.opensourcemac.org.

Finder
Finder is the Mac’s default file browser and also allows the user to organise folders and files. It can be accessed by clicking the Finder icon from the Dock, pressing Command + N.

The recommended viewing option for Finder is the Column View. This enables a user to be able to identify the directory path of a given folder or file. It is also useful to label folders and file names with a colour code for quick reference. Downloads directory is best viewed in List View with files sorted by the date they were added. This assists in quickly locating recently downloaded files.

Preferences can be set using the icons at the top of the Finder box.

Application switching
Switching between open applications can be one of the most common causes of wasting productivity time. Moving open windows out of the way and minimising them is particularly time consuming. The most efficient method is to leave all open windows exactly where they are and move between them by holding down the Command key and pressing the Tab key. Another alternative would be to use the F3 key.

Text to Speech
To enable Text to Speech, select System Preferences > Speech, Text to Speech. Configure in the following way:

- Tick Speak selected text when the key is pressed
- Click Change key
- In the window displaying the key command, type the Tilde key (left of the number 1 key)
- You will be asked if you are sure you don’t want to use a modifier key. Click confirm.

Now whenever you select a piece of text, use the Tilde key to hear the selection speak. The new Australian voices (Lee and Karen) are free computer voices available in Lion and Mountain Lion. Click on the current system voice in the Speech Settings and select Customize.

The built in Calculator is capable of speaking each button pressed. It has three modes, a simple calculator, a scientific calculator and a programmer’s calculator.

Converting Text to Audio
The operating system of the mac has the built-in ability to convert selected text into an mp3 file and instantly add it to theiTunes music library. To turn this feature on go to System Preferences > Keyboard. Click the Keyboard Shortcuts tab. Select Services from the left panel.
Select Add to iTunes as a Spoken Track from the subheading Text in the right panel.

You can now select a piece of text anywhere, right click, choose Add to iTunes as a Spoken Track. You will be prompted to give your audio track a name and the text will now be converted to an audio file and added to iTunes in an album called Spoken Text.

Safari

Safari will display a Reader button in the Address window if the web page you are on contains an article.

Click on the Reader button and it will remove visual distractions from online articles so you can focus on the content. The onscreen controls let you zoom in on the article, view in Preview or print. It also makes the Speak Selected Text or VoiceOver option easier to activate and control.

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From What To Why
Developing Children’s Thinking Skills Through Questions

Available for purchase from SERU
$35.00
(Book & CD)

Download the flyer at:
Publications.htm

Questioning is a frequently used method of teaching in Australian classrooms. It is therefore very important that children understand questions and are able to respond appropriately. Many parents and teachers report that some students do not seem to understand certain questions and sometimes give unusual responses. This resource aims to develop children’s thinking and assist them in giving appropriate responses to the questions adults ask.
Making Life a TAD Easier

Technical Aid to the Disabled SA (TADSA) was an exhibitor at the recent Special Education Expo.

TADSA, which is in its 34th year of service, is a state-wide charity that aims to help people with disabilities overcome problems by creating or modifying devices where there is no other solution readily available. The devices built by TADSA’s inventive volunteers can allow people to stay in their homes (i.e. not go into care), enter or return to work, study, recreation or sport.

Following presentations about TADSA’s services by the organisation’s public relations officer to the staff of the St Morris, and the Findon High disability units, several projects have been undertaken for these units.

For St Morris, TADSA completed the following projects:
- wooden stands for iPads
- manufacture of scissor boards (the school had only one working board - TADSA built six more)
- mounting of smart board to wall - allowing students in wheelchairs to be able to reach the board to write on it (TADSA worked with the school’s IT department on this project)
- extended legs for an art easel - allowing students in wheelchairs to be able to reach their artworks on the easel

For Findon High:
- wooden stands for iPads
- a foot board
- jellybean switch operated power outlet (to be finalised) mechanism to activate a camera by foot for a student in a wheelchair (to be finalised)

TADSA also has a program which provides customised bikes for children with disabilities. The Freedom Wheels program modifies standard bikes using a number of prefabricated accessories. These include postural, foot, leg and ankle supports, special handlebars and outrigger wheels (similar to training wheels but stronger and more stable). Other accessories can be designed and built for an individual’s need. TADSA volunteers work with occupational therapists to ‘prescribe’ a bike specifically for each child at bike clinics which are held each school holidays.

TADSA is keen to assist other disability units if they need custom built devices or they have equipment which needs modification (it may be possible for TADSA to undertake repairs to certain equipment). Also, and subject to availability, a TADSA representative may be available to give a presentation to staff.

Ian Beaton
Public Relations Officer, TAD SA
Ph 82612922 or 1300663243
www.tadsa.org.au
The following is a list of agencies, organisations and businesses who exhibited at the Special Education Expo, with contact details. A number of exhibitors have provided information about their service.

The TAFEshop is Australia’s ‘One-Stop’ site to browse and access high quality teaching and learning resources. A diverse range of advanced training and vocational educational resources are offered, specialising in Childcare, Community Services, Nursing and Health, Hairdressing and Beauty, Hospitality, Tourism and English as a Second Language. The TAFEshop is located at: 100 Smart Road, Modbury, 5092 Ph (08) 8207 8134 Mb 0419 545 091
https://shop.tafesa.edu.au

Kid Sense Child Development is a private practice providing Occupational and Speech Therapy to children with additional learning needs in movement, play, language, learning and behaviour. Visit www.childdevelopment.com.au for extensive free online resources, self assessment and workshop information or contact:
90 Unley Road, Unley SA Ph 1300 660067

Inclusive Directions is an organisation with a long history of promoting and supporting inclusion across a range of settings including early childhood services, education, and community services. The organisation is committed to developing the capacity of communities to include all children and families but particularly those whose educational and life outcomes may be compromised by their physical or learning needs and abilities, or by other social, cultural or physical factors. Further information regarding specific support and programs can be found at www.directions.org.au or by contacting:
North Office
5-7 Rasheed Avenue, Newton Ph 8165 2900

Pearson is a leading learning company. Combining 150 years’ experience with personalised online support, Pearson helps people learn whatever, wherever and however they choose. Schools Division, Pearson Australia 20 Thackray Rd, Port Melbourne 3207 Ph (03) 9245 7237 www.pearson.com.au

Leading Digital, formed in 2002, provides ICT consultation, training and equipment for staff in schools and preschools as well as the general public. They specialise in providing technology solutions for the education industry, to minimise confusion and the ‘techno-jargon’ so often associated with the industry. www.leadingdigital.com.au Neil: 0438722187

The Specific Learning Difficulties Association of South Australia - SPELD SA is a non profit organisation that provides advice and services to support children and adults with specific learning difficulties, such as dyslexia. SPELD SA has a range of specially chosen resources that are available for purchase through their website www.speld-sa.org.au. SPELD SA Ph 8431 1655 emailing info@speld-sa.org.au

The Australian Paralympic Committee helps athletes with disabilities participate in sport, with pathways leading to Paralympic competition. There are six different disability groups included in Paralympic sports, which are: Amputee, Cerebral Palsy, Vision Impairment, Spinal Cord Injuries, Intellectual Disability and Les Autres (others). Students with a Disability also have their own pathway to sporting involvement through the School Sports program for both Primary and Secondary Schools. To see the pathways for students with a disability, visit www.decd.sa.gov.au/sport/pages/sport
The Australian Paralympic Committee also run Talent Search Days throughout the year, which is an opportunity for athletes with a disability to have a go at a variety of Paralympic sports, meet coaches, and find out more about classification.
For more information on sporting opportunities contact:
Cathy Lambert
Australian Paralympic Committee Development Coordinator cathy.lambert@paralympic.org.au or
Emily Ayles
Boccia Development Officer. Ph 8415 8602.

That’s Cute! Quality wooden puzzles, novelty stationery, fine motor skill and finger strength toys, ranging from $2 to $25.
Lyn Smart Mb 0413302499 thatscute@tpg.com.au

Child’s Play offers interactive learning, fun learning materials in a diverse selection of formats and experiences.

Other exhibitors included:
Adelaide West Special Education Centre
Novita Tech
Autism SA
Interwork
Write Intervention
Multilit
Parents 4Kids
LEARNING LANGUAGE AND LOVING IT: A GUIDE TO PROMOTING CHILDREN’S SOCIAL, LANGUAGE AND LITERACY DEVELOPMENT IN EARLY CHILDHOOD SETTINGS

Authors: Elaine Weitzman and Janice Greenberg
A Hanen Centre publication
SERU catalogue number: 17.03320101

The Hanen Centre was established in Canada in 1975 by a speech pathologist to provide training for parents to support their children’s language development, but has since become a world renowned training organisation for professionals involved in early childhood as well as parents. The book ‘Learning Language and Loving It’ is drawn from the intensive program of the same name which promotes a child-centred approach for early childhood educators. The book is a very practical easy to follow guide to facilitating children’s social, language and literacy development through everyday interactions and activities.

Learning Language and Loving It is divided into four parts:

Take a closer look at communication. In this section the book examines children’s conversational styles, the roles teachers play during their interactions with the children and how the behaviour of each is affected by those roles. Also covered in this section are the stages of communication and language development and what to expect from children at different ages.

Get every child in on the act – so all children can interact. Sociable children create their own opportunities to interact with others, but this section gives teachers strategies to ensure that every child has the same opportunities. Each chapter has practical suggestions for teachers to promote interactions and conversations between children.

Provide information and experience that promote language learning. Teachers need to take language learning beyond satisfying physical and social needs, to using language to imagine, negotiate, plan and problem-solve. This section gives clear practical suggestions for adjusting the way you talk, creating an environment for talking and learning, and promoting pretend play.

Let language lead the way to literacy. Teachers play a critical role in helping children develop the attitudes, skills and knowledge that lead to literacy. Children see print being used in meaningful ways and make the connection that print means something. The two chapters in this section show how children develop reading and writing skills as they participate in and communicate about real-life meaningful literacy events, and how to build language skills through interactive and stimulating group times.

Sample pages
While the book is comprehensive and based on current research, the information is easy to access because it is well organised and clearly presented. Every page has a number of illustrations with speech bubbles to demonstrate a particular strategy or communication situation. The activities are designed to help all children develop their communication and social skills, including those whose language skills are delayed.

There are four observation guides:
- The child’s interactions with teachers and peers.
- The child’s stages of language development.
- The child’s interactions with peers and a planning guide to promote peer interaction.
- The development of pretend play.

Preschools and early learning centres would find this book to be a very useful resource for teachers and early childhood workers who are responsible for creating enriched learning environments. It could also be used as a basis for informing parents about children’s language and social ability, and how they can help at home.

Other Hanen Centre publications available at SERU:

**Teacher Talk Workbooks.** There are three books in the set which complements the book Learning Language and Loving It, as the Teacher Talk Workbooks focus more on the practical strategies. The books are called:
- Encouraging Language Development in Early Childhood Settings
- Fostering Peer Interaction in Early Childhood Settings
- Let Language Lead the Way to Literacy.

**Allow Me! A Guide to Promoting Communication Skills in Adults with Developmental Delays.**

**It Takes Two to Talk. A parent’s Guide to Helping Children Communicate.**

**More than Words. Helping Parents Promote Communication and Social Skills in Children with Autism Spectrum Disorder.** This includes a DVD which has real-life examples of children in communication situations to show parents ways of fostering their children’s communication skills.

**TalkAbility. People skills for verbal children on the autism spectrum – a guide for parents.**

**ABC and Beyond. Building Emergent Literacy Skills in Early Childhood Settings.** The foundation for emergent literacy skills, based on current research are conversation, vocabulary, story comprehension, language of learning, print knowledge and phonological awareness. ABC and Beyond has a chapter on each of these building blocks, giving clear practical strategies in a very easy to read format.

The website for Hanen Centre is also a good source of information: [http://www.hanen.org/Home.aspx](http://www.hanen.org/Home.aspx)
As the literacy room at SERU is primarily used for professional development for teaching early reading skills, the visual displays focus on the 5 Big Ideas in Beginning Reading: Vocabulary, Phonemic Awareness, Phonics, Fluency and Comprehension. The display in the literacy room has recently been changed to focus on phonological awareness. Resources from the previous display relating to vocabulary, are now available for loan.

Phonological awareness is the ability to attend to the sounds of a spoken word.

Phonemic awareness is a subset of skills which focus on the ability to attend to the individual sounds in words. They include isolating initial and final sounds, blending, segmenting and manipulating. Phonemic awareness is a strong predictor for early reading skill development.

Skills in phonological awareness are oral and develop along a continuum. Based on the early skills of word and syllable awareness, rhyme and onset-rime, children advance to the higher level skills of alliteration and blending, segmenting and manipulating sounds in words. The aim is to help children to build accurate sound representations for words.

Teaching phonological awareness skills requires teacher modelling and frequent practice for the students. Children from a non-English speaking background and children from homes that do not provide rich language experiences are at risk of early phonological difficulties. Also at risk are children with a history of hearing, speech or language difficulties. These children will require ongoing intervention in literacy; however specific training in phonemic awareness can lead to improved reading and spelling outcomes.

Visitors to SERU are welcome to come in to the literacy room to view the display and the resources to learn about phonological awareness. An information booklet listing activities and resources is available for visitors to take away.

Resources on display include:

- **SPA: Screen of Phonological Awareness** 55.0096.01
- **Phonological Awareness in Words and Sentences (PAWS)** 63.3268.01
- **Sound Practice Phonological Awareness in the Classroom.** 63.2236.01
- **The Gillon Phonological Awareness Training Program.** 63.3062.01
- **A Sound Way - Phonological Awareness Activities for Early Literacy 2nd Edition.** 63.1724.02
- **Phonological Awareness Fun Pack Game.** 63.3314.01
Fine Motor skills activities encourage the use of the hands and fingers. They require the muscles in the hand to work together to perform precise movements. For some children their hands do not seem to work together as they should and this can lead to frustration and avoidance of tasks that require them to coordinate all of the muscles and joints in their hands and fingers.

Practice is needed so that the child can go on to develop higher-level fine motor skills such as writing.

Below are a list of Apps that can be used to assist in the development of fine motor skills:

1. **Cut the Buttons HD**, $1.99. A game where the objective is to pick up the scissors with two fingers and by moving the blades (just like you would with real scissors) cut the buttons. The settings allow the user to configure for left hand players.

2. **Chalk Walk**, $2.99. This app has been developed to assist students to improve their pincer grip. It also teaches hand-eye coordination, simple motor skills, simple letters and words introduction, and promotes left to right progression.

3. **Squiggles!** Free. This app encourages children to draw squiggles and then hit a ‘go’ button to make things ‘happen’.

4. **Bugs and Buttons**, $2.99. This app has great graphics and is a collection of games and activities that engage and build skills in the areas of imaginative play, counting, fine motor, patterning, sorting, tracking and more.

5. **Dexteria Fine Motor Skill Development**, $5.49. Dexteria is a set of therapeutic hand exercises that improve fine motor and handwriting readiness. This app takes full advantage of the iPads multi-touch interface to help build strength, control and dexterity.

6. **Ready to Print**, $10.49. Ready To Print teaches handwriting skills the fun way! This app was created by an occupational therapist to assist the teaching of pre-writing skills.

7. **Letter School**, $2.99. A game to learn all about letters and numbers: writing, counting, phonics and more.
8. **Touch and Write**, $2.99. This app was developed by classroom teachers and recreates the fun and effective teaching strategies used in classrooms everyday, such as shaving cream, finger paint and more.

9. **Write My Name**, $4.49. This app is a fun way for children to practice writing letters, words, names and phrases. Photos and images can be added to personalise learning.

10. **rED Writing: Learn to Write**, $1.99. This app teaches children to write using letters and numbers using Australian education approved font.

11. **School Writing: Learn to Write and more**, $5.49. This app also uses the Australian education approved font. It is fully customizable and would be suitable for young learner through to year seven students.

There are many options available to assist students with motor challenges to navigate and use a computer as effectively and independently as possible. This can include specialised pointing devices, alternative keyboards or switches. Trackpads are also an option available for students with motor planning difficulties or deteriorating motor control. All of these are available as wireless options which provide scope for physically challenged students to access a computer’s IWB in the classroom.

**REMOTE COMPUTER ACCESS WITH THE iPAD**

In recent times, a number of apps which can turn the iPad into a large track pad for controlling a computer in the classroom have also become available. Some of the more popular ones include Splashtop, TouchMouse, Touchpad and PocketCloud. These apps come with a basic array of settings to accommodate the particular physical preferences of a user. In some cases, such as with Splashtop, a user with vision difficulties has the computer’s desktop show up on their iPad and they can touch the iPad screen to remotely control the computer. However, these apps offer very little in the form of customisations for physical access methods. Until now! Panther Technologies have just released Panther Connect, an app which offers highly innovative methods for physically accessing a computer.

**Panther Connect**

This app offers a wide array of trackpad configurations that can support more than just controlling a cursor and various mouse button actions. The app can be used to provide better and more efficient access to software programs, screen navigation, file management, website navigation and the playing games.

The app has many trackpad configurations. This includes a:
- basic trackpad for generic use
- split speed trackpad with 2 preset gliding speeds that allows a user to quickly transition to a slower glide speed as the cursor nears the target
- Mini-trackpad to provide maximum access to students who have a minimal range of movement
• and a 2-Axis/4 Axis mode to provide greater accuracy for users with limited gliding control.

The usual array of mouse options such as Control+Click or Double Click can be easily emulated by the single touch of an icon.

A student can instantly access and launch any software program on their Windows computer. With a quick swipe of the app, software from the Task Bar, Start menu, the Accessories directory, and Program files folder comes in to view.

A student can also instantly access and launch any software program on a Mac. With a quick swipe of the app, software from the Dock, the Applications folder, Utilities section or Games comes in to view.

Multitasking between apps is effortless with Panther Connect.

Students have instant access to the popular commands of software programs including the instant ability to open, save or print documents. A tap of the Menu Bar icon instantly highlights the menus at the top of the software program.

Navigation and selection of menu commands is almost effortless. This is particularly useful for the navigation of complex software or web sites. The iPad keyboard can also be instantly accessed for text entry.

Students with limited motor movement can also utilise common editing tools for the writing process.

In summary, this innovative app has a highly intuitive interface where all students can have the opportunity to utilise technology in a seemingly effortless manner. This allows a learner to place greater cognitive attention on their interactions with the digital content, a very empowering notion indeed. This app is priced at $65. It is the first of many highly innovative apps based upon the Principles of Universal Design. Panther Technologies has a number of other apps dedicated to providing universal access tools for math and literacy. Next term’s SERUpdate will provide a review of many of these newly released apps. More information can be found at http://panthertechnology.com/
NEW RESOURCES

Children with Social, Emotional and Behavioural Difficulties and Communication Problems 2nd ed. Cross, M. 2011. 24.0200. 01
This book contains guidelines for assessing communication and strategies to help learners to develop their communication skills. Contents include: Are Language and Emotional Development Linked? Communication Difficulties in Vulnerable Children and Young People; What Can be Done to Help Young People with Communication, Emotional and Behavioural Problems?

This book contains an Executive Function curriculum for teachers to use to improve flexibility for learners with Autism Spectrum Disorders. The classroom based curriculum, directed at students aged 8 with average cognitive ability and language skills, provides ready to use lessons. The accompanying CD-ROM provides: game cards, student worksheets and other printable materials.

Conversations about Text 2. Rossbridge, J. & Ruston, K. 2011. 36.0294.01
This book focuses on teaching grammar in the context of factual texts in the primary and middle years with the chapters organised around the following genres: Describing, Instructing, Recounting, Explaining and Persuading.

Is this normal? Understanding Your Child's Sexual Behaviour. Brennan, H. & Graham, J. 2012. 66.1497.01
This resource provides suggestions designed to support parents/carers to feel more comfortable about the area of sexuality and young people. The book includes: an explanation of the Traffic Lights framework for understanding/responding to children's sexual behaviours; ideas for what to do when a child's behaviour is not appropriate for their age; suggestions for how to get support.

Balance Boat. CE Publishers 2012. 64.1535.01
This wooden balance boat, suitable for learners aged 3 years and over, can be used to develop an understanding of the relationship between different sizes, weights, quantities and ways to keep things in balance.

This handbook is designed to assist parents to prepare a child with Down Syndrome or other intellectual disability for adulthood. It contains practical tips and step-by-step instructions for envisioning the future, developing a transition plan and seeing it through.

Wooden pirate jigsaw puzzle. Melissa & Doug Inc. 2012 83.1705.01
Colourful wooden baseboard puzzle, depicting a humorous pirate boat scene, consists of 48 wooden jigsaw interlocking pieces suitable for learners 4 years and over.

Maths Literacy Pack Counting Pack 1. SERU. 2010. 64.1522.01
These SERU produced Mathematic Literacy Packs series are designed to increase student understanding and competency in the literacy of Mathematics. The focus of this pack is Counting and the range of resources in this pack provide a variety of ways to learn, review or reinforce skills in counting. See also: 64.1522.02 Time; 64.1522.03 Odd & Even Numbers; 64.1522.04 Fractions; 64.1522.05 Size

Stepping Stones Triple P for Families with a Child who has a Disability. Sanders, M. et al. 2009. 24.0197.01
This workbook is one in a series of publications for parents and professionals based on the Triple P - Positive Parenting Program. This programme is designed for parents of children with developmental delay, sensory or physical disabilities.

Talkies Visualizing and Verbalizing for Oral Language Comprehension and Expression. Bell, N. & Bonetti, C. 2006. 61.1097.01
Talkies is a program of instruction designed to develop the imagery-language connection for young children or students with weak receptive and expressive oral language skills, including those on the autism spectrum.

This book contains articles related to behaviour from Exchange - The Early Childhood Leaders’ Magazine. Contents include: When Children are Difficult; Positive Behaviour Strategies; Conflict Resolution; Power Struggles; Anger; Parent Perspective on Discipline - Parent/Staff Relationships.
Our Cat Cuddles Pack. Phinn, G. 2005. 61.1075.01
This resource pack contains a picture book with supporting materials such as soft toys, a non-fiction book relating to the theme, a CD and a language game based on the book. A card of ideas contains suggestions on how to develop listening, reading and writing skills using the contents of this pack.

Improving schools, Developing Inclusion. Ainscow, M. et al. 2006. 34.0395.01
This reference book uses researched evidence to explore how the issue of more inclusive schools can be addressed. It looks at: implications for the work of school leaders; how schools can collect and use evidence in order to strengthen their practices; the implications for relationships between schools, local communities and researchers.

Physical Activities for Improving Children’s Learning and Behaviour. Cheatum, B & Hammond A. 2000. 24.0154.01
This book contains activities designed to promote sensory motor development and also includes an overview of the Sensory, Vestibular, Proprioceptive, Tactile, Visual and Auditory Systems.

This training program, written for people with intellectual disabilities and/or communication disorders, is suitable for implementation with a group from between six to sixteen people, aged from 12 years. The focus is on supporting students to develop self-esteem through an interactive teaching approach where concepts are taught using a three tiered approach.

I Have The Right To Be Safe. Family Planning QLD. 2007. 66.1499.01
This resource is designed to promote self protection skills in an accessible way for young people with literacy difficulties aged between seven and fourteen years. It includes facilitator strategies, worksheet/cards, extension activities and additional resource ideas.

Catch A Concept: Level 1 Bellingham, J. 63.2399.01
This book introduces basic mathematical concepts to learners in the Early Years. The activities are integrated across the curriculum and provide for whole class, pair or individuals. Each set of concepts supports the development of vocabulary and defined mathematical skills. The book also includes a simple test with instructions and two checklists.

These Greetings and Everyday Communication cards are part of the Auslan Children’s Picture Flash cards series. The 38 flash cards in this set are double sided with one side depicting the object and the other illustrating the relevant sign. See also: 61.1080.01 Descriptive Signs (Colours & Shapes); 61.1080.02 Places, People & Family; 61.1080.03 Around the House.

Opposite Word Dominoes. 85.0699.01
This resource consists of two sets of 24 Opposite Words plastic dominoes. Sample of words in set A include: hot-cold; give-take; sell-buy; best-worst; soft-hard. Sample of words in Set B (more complex words) include: advance-retreat; accept-reject; pure-impure; obey-disobey.

Literacy Maths Pack Fractions, SERU. 64.1522.04
This is one in the SERU produced Mathematic packs series which are aligned within the Australian Curriculum. These packs are designed to increase student understanding and competency in the literacy of Mathematics. The focus of this pack is Fractions and the variety of activities on the Activity Card present a range suitable for R-2 students.

This game is designed to assist students to learn the social skills required to get along with others, to be able to interact appropriately with their peers, and have success in the classroom. Six card decks give students practice in these areas: nonverbal communication; conversational skills; being a friend; practicing self-control; being polite; following directions.
Would you like to contribute an article?

The SERUpdate relies on the willingness of DECS personnel to contribute articles. Feedback from readers confirms that contributions from sites are a valuable way of keeping informed with what is happening at other schools.

The topic for the next edition of SERUpdate is *What's New in Special Education, DECD*. This edition will include information about the new Special Education Team and the National Partnerships More Support for Student with Disabilities initiative. A list of current resources that can be borrowed from SERU to support this initiative will follow each project description.

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### Save the Date for SERU Workshops

#### SEPTEMBER

**Mon 24th**

- AAC An Overview of Apps
  - 9:30 - 11:30am
- An Introduction to Tap Speak Choice
  - 1:00 - 4:00pm

**Tue 25th**

- Introduction to Proloquo2go
  - 9:30am - 12:30pm
- Making Learning Accessible with the iPad
  - 1:00 - 4:00pm

#### OCTOBER

**Wed 17th**

- eBook Creation with the iPad
  - 4:30 - 7:30pm

**Saturday 20th**

- iCan Customise the iPad for Learners with Individual Needs and Abilities
  - 9:30am - 12:30pm

Descriptors and registration forms can be found at [http://web.seru.sa.edu.au/Workshops.htm](http://web.seru.sa.edu.au/Workshops.htm)