WHAT’S NEW

TECHNOLOGY RESOURCES
The resource centre has 2 iPads with a range of Apps to try. iPads will also be available for loan from term 3.

SERU has purchased 2 Nintendo Wii’s for trial; read more about it in TechBits.

VIDEO CONFERENCING EVENTS
New events have been planned; see page 39 for more information.

THE SCREENING AND ASSESSMENT ONLINE CATALOGUE has been updated and is now available on the SERU website.

Gross Motor Coordination Programs

Introduction

This edition of SERUpdate explores a diverse range of movement and coordination programs provided by educators and other professionals. The long term benefits of coordination programs for the wellbeing of learners are described, including physical health, social development, self esteem and cognitive development.

At Wandana School Occupational Therapists (OT’s), class teachers and a Neuroscience Coordinator work together to plan motor skills sessions using a Circus theme, with neuroscience research underpinning the program. In another article an OT describes activities which don’t require expensive equipment.

The Conductive Education program and MOVE program are featured, and an article from The Briars describes a sensory approach. Staff from primary schools write about their programs and discuss the benefits for students. An article from Autism SA describes the issues impacting functional roles of children. Other articles include information from the Minimal Motor Dysfunction Unit (MMDU), the Early Development Program at Seaton Central, an inclusive Physical Education program and the DECS swimming program.

An article in last term’s SERUpdate on Learning Difficulties provided a few tips from SPELD for parents who may be concerned that their child has dyslexia. An addendum in this edition provides information by DECS psychologist for schools regarding students who may have dyslexia.

Please refer to the back cover of the SERUpdate for next term’s topic and let me know if you are interested in submitting an article.

Dymphna James
Assistant Manager, SERU
## IN THIS ISSUE

### FOCUS ARTICLES

<table>
<thead>
<tr>
<th></th>
<th>Title</th>
<th>Author(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>It’s a Circus - All Right!</td>
<td>Hugh Stewart, University of South Australia</td>
</tr>
<tr>
<td>4</td>
<td>Conductive Education</td>
<td>Kati Balla and Andrea Horvath, Special Education Resource Unit</td>
</tr>
<tr>
<td>5</td>
<td>Gross Motor Skills: Why and How to Develop Coordination in Children</td>
<td>Joanna Buttfield, Kidsense Child Development</td>
</tr>
<tr>
<td>7</td>
<td>From Dependence to Independence in a Water Environment</td>
<td>Debbie Wright, DECS Swimming &amp; Aquatic Unit</td>
</tr>
<tr>
<td>8</td>
<td>Something in the Way We Move: The Learn to Move Program at Bellevue Heights PS</td>
<td>Paul Hills and Birgit Lucas, Bellevue Heights Primary School</td>
</tr>
<tr>
<td>10</td>
<td>Women’s &amp; Children’s Hospital: School Age Gross Motor Programme</td>
<td>Marguerite Neate, Minimal Motor Dysfunctional Unit, WCH, CYWHS</td>
</tr>
<tr>
<td>11</td>
<td>Enhancing Learners Wellbeing, Incorporating a Sensory Approach</td>
<td>Jane Mellow, The Briars Early Learning Centre</td>
</tr>
<tr>
<td>14</td>
<td>Motor Coordination - Issues Impacting Functional Roles of Children</td>
<td>Jade Smith, Autism SA</td>
</tr>
<tr>
<td>18</td>
<td>‘MOVEing’ Milestones</td>
<td>Jackie Butler, Adelaide West Special Education Centre &amp; Megan Palmer -</td>
</tr>
<tr>
<td>19</td>
<td>The Hopperoos Programme</td>
<td>Sandie Palamountain, Forbes Primary School</td>
</tr>
<tr>
<td>21</td>
<td>Ridgehaven School’s ‘Jumping Beans’ Gross Motor Coordination Program</td>
<td>Gill Garrity, Ridgehaven School</td>
</tr>
<tr>
<td>23</td>
<td>Programming for an Inclusive Physical Education Program</td>
<td>Rob McKinnon, Adelaide West Special Education Centre</td>
</tr>
<tr>
<td>25</td>
<td>The Early Development Program (EDP) Seaton Central</td>
<td>Elizabeth Martin, Seaton Central</td>
</tr>
<tr>
<td>26</td>
<td>Club Slick</td>
<td>Down Syndrome Society</td>
</tr>
<tr>
<td>27</td>
<td>SASRAPID</td>
<td></td>
</tr>
</tbody>
</table>

### OTHER ARTICLES

<table>
<thead>
<tr>
<th></th>
<th>Title</th>
<th>Author(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>28</td>
<td>Access Options and Accessories for iPads...Gathering Strength As They Grow</td>
<td>Jane Farrell, Spectronics</td>
</tr>
</tbody>
</table>

### REGULAR FEATURES

<table>
<thead>
<tr>
<th></th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>Spotlight on SERU Resources</td>
</tr>
<tr>
<td>32</td>
<td>Resources Related To The Topic</td>
</tr>
<tr>
<td>34</td>
<td>Articles Related To The Topic</td>
</tr>
<tr>
<td>35</td>
<td>TechBits</td>
</tr>
<tr>
<td>35</td>
<td>Web Links</td>
</tr>
<tr>
<td>40</td>
<td>New Resources</td>
</tr>
<tr>
<td>42</td>
<td>Upcoming Events</td>
</tr>
</tbody>
</table>
Classrooms are complex environments where successful performance requires the mastery and integration of many skills. Listening, attending, doing things and getting along are all important. Movement and coordination are two areas that can make a student ‘stand out’ and feel self conscious. The way to become more coordinated and get better at various movements is, of course, to practice specific skills. However, most students (and adults) don’t like to practice a skill around others if it makes them feel different or deficient.

So, how to get around this conundrum? It may surprise you to know that the answer is – a circus!! At Wandana Preschool-7, the UniSA Occupational Therapy (OT) program combined with staff and Year 2-3 students to create an environment where all students needed to learn new skills at some level. Using a circus theme, all students have had the chance to work on functional movement skills in areas of balance, juggling, and tumbling. This approach also focused on the development of the underlying skills of attention, impulse control, arousal modulation and goal setting.

Wandana Preschool-7 is one of four ‘Neuroscience in the Classroom Cluster’ schools. This means that the students already had some understanding of how important it is to help your brain establish good patterns of thinking, movement, listening and self control. It also means that they know that ‘the more they practice something, the better they get’ as long as they focus their practice on the appropriate skills.

Problem

The class teacher and school staff identified a number of children in the class with poor movement, listening and task-engagement skills. After collaborative discussions, it became clear that a program was needed where the children with poor movement and coordination skills could get lots of practice without feeling as though they were being singled out, and where the whole class could learn some new motor skills as well as developing general positive learning patterns. We wanted to develop a program that might be used by other classes in the school and where the staff involved, could learn from each other.

What we did

The program was jointly developed by a team: the class teacher, Neuroscience Coordinator, OT, OT students and the Year 2-3 students, in response to the demonstrated needs of individuals in the class. We decided to create a class performance in order to create an outcome, meaning and a timeline, and also some pressure and motivation to complete the learning.

The weekly sessions

The sessions occurred once per week over two terms. Each session began with a Neuroscience lesson which focused on listening and attending, a magic trick and its explanation to focus on attention and perception skills, specific motor skills sessions, then review and reflection (if there was time). Each session lasted for 1 hour and 10mins. We introduced the four key skills (tumbling, balancing, juggling and cart-wheeling) to the whole class and gave each student a turn at each skill. As the term went on, the students chose one of the skills as their specialty and began working on it individually and in groups. Each child followed the CO-OP strategy [(Polatajko and Mandich 2004] explained more fully below), and identified at least one goal, a plan for how to achieve the goal and a check on their performance. Students wrote or were assisted to write the steps down on a sheet of paper. They went on to use their plan and revise their goals and plans each week until these were achieved. As the individual skills developed we were able to reconfigure the groups and develop a group act which would become part of the circus performance. We had four groups working concurrently. The real challenge for the teaching team was in applying the CO-OP approach, an individual therapy model, to a classroom of young students with varying levels of ability. All the students had to learn a new and challenging task so all were engaged and motivated with their learning.

We were also focusing on the perceptual and storytelling skills involved in doing and understanding magic tricks. Each week one of the staff demonstrated a new magic trick (we too had a steep learning curve), and after a few weeks we asked the group to audition to do a magic trick performance as part of the circus. Four brave students volunteered and all made it though the auditions. We also decided to add a ‘Strong Kid’ act and had auditions for students who could act like a strong man. Five boys made it through the auditions.

The program went for 16 weeks, 1.5 hours per week and incorporated gymnastics, literacy and drama subject areas as well as gross and fine motor, visual perceptual, visual motor and writing skills. In addition, the circus performance required students to demonstrate emotional control, sustained attention, anxiety management, impulse control, planning and problem solving.

Using Neuroscience to underpin the program

In the last 15 years, research in neuroscience has been able to improve understanding of how our brains work and the processes we actually use in learning.
There have been many findings which confirm what we already know is the best way to learn. That is:

- attention is critical to learning
- practice is important and needs to be both intense and frequent
- practice must be accurately targeted and of high quality
- repetition is important in the maintenance of any acquired skill.

However, other findings are more revolutionary. For example, we now understand that the brain physically reorganises itself in response to insult/injury, and in response to challenges from the environment. These changes are measurable and organic and they continue throughout life provided your brain is given new stimuli. Because the brain constantly experiences a wide variety of inputs, it naturally seeks to find ways to manage all incoming information. It seeks patterns. Patterns (aka routines and habits) allow our brains to become efficient in our activities, responses and thinking. So, patterns are very helpful. They are also a hindrance. How? Once your brain has found a way to do something—a patterned response—it no longer puts attention towards the activity. This pattern also becomes the platform for further learning in an area. Changing a pattern is much more difficult than learning it in the first place. To illustrate: when a child is learning to write the alphabet, s/he is so busy trying to get the letter to look 'right' that things like a pencil grip or correct letter formation seem very secondary. However, what educators and therapists know is that holding a pencil too tightly will cause a child to fatigue and be unable to do the same amount of writing as peers. Making a letter any which way may create a pattern that, later, makes writing in linked script next to impossible. A letter just won't link to the next if it is finished in the wrong place. It’s hard and frustrating to unlearn a strong pattern in order to build new learning. It's best to learn the correct way from the start.

Another important way to think about learning is that any learning can facilitate further learning, so learning to throw a ball facilitates learning to read because it puts the brain in a learning-enabled mode where all the necessary chemicals are activated to help the next learning activity. We now know that even watching movement and imagining movement are important in strengthening and reinforcing neural pathways and maintaining skill (Google ‘mirror neurons’ for more information).

The CO-OP Approach

The Cognitive Orientation to Occupational Performance (CO-OP) is an approach to teaching children who have difficulty with functional activities. It is based on a cognitive strategy approach to learning, as well as theories from motor skill acquisition and occupational science, and fits nicely with the new understandings about the brain. It allows students to set their own goals, and uses the mnemonic ‘Goal-Plan-Do-Check’ as the cognitive problem solving strategy. The therapist works closely with the student to refine and grade the learning of the skill, but the main goal is for the student to learn the Goal-Plan Do-Check strategy so it can then be used in other skill learning tasks. In our program, the therapist or teacher focused heavily on one skill over a 16 week period, with the goal of achieving mastery in that skill. We used the explicit cognitive strategy (Goal-Plan Do-Check) to shape the natural motor learning process of trying movement patterns until the problem is solved. We also focused attention on the motor skill problem, made the learning strategy explicit, and encouraged self-directed problem solving. We believe that these skills can be used as the foundation for all learning.

Room 9 will present their Circus performance soon and are very busy practising and putting the final touches to their costumes. We are in the process of putting notes and resources together and will evaluate the children’s progress in terms of motor skills learnt, personal goal attainment and ability to apply the Goal-Plan Do-Check strategy. The development of the performance has been a rich and valuable learning opportunity full of chaos, tumbles, bruises, fun and laughter: in short-a circus.

References


Poulsen, A., Ziviani, J., Cuskelly, J. 2006, General self-concept and life satisfaction for boys with differing levels of physical coordination; the role of goal orientations and leisure participation, Human Movement Science, vol 25, pp 839-860.
Developmental Coordination Disorder (DCD) - What is it?

The DECS package on DCD states that it is a “spectrum of issues that affect a child’s ability to acquire or perform a skilled movement” (Hillier, Grimmer and Kay, 2008). Usually the child’s cognitive and other abilities are much better than their motor abilities. Most children learn to move using a complex process of problem solving for movement solutions. They try different movement patterns and accept or reject them depending on the feedback they receive, and their evaluations of their achievements. Then they refine the movement through a process of repetition or practice. Sounds just like the way we learn anything doesn’t it? However, children with DCD don’t seem to acquire motor skills as easily as other children and there are many reasons hypothesised; problems with integration of sensory information, problems with attending to the right incoming information or problems choosing the right motor plan. It is not clear what the reason for DCD is. However it is estimated that one in twenty children may have some form of movement disability and is more common in boys.

A recent cohort study in the UK showed that DCD varied from between 1.8% to 4.9% depending on how it was diagnosed (Lingam et al. 2009).

The outcomes for children with DCD can be quite varied. Some adapt and thrive, while for others frustration, low self esteem, and social issues including bullying are of increasing concern, especially for older rather than younger boys (Vincent, Stewart and Harrison, 2008). Low participation in social-physical activities ie games and sport, are associated with loneliness and dissatisfaction with life for boys in the 10-13 age group (Poulsen, Ziviani and Cuskelly 2006). We also know that the long term outcome for these children can be quite dire with at least one study of boys with DCD and ADHD showing over half of the group diagnosed at 7yo had poor psycho-social function at 22yo with “antisocial personality disorder, alcohol abuse, criminal offending, reading disorders, and low educational level .. overrepresented in the ADHD/DCD groups” (Rasmussen and Gillberg, 2000).

A recent study of 60 boys in Qld (Poulsen, Johnson and Ziviani 2010) showed that five subgroups of children could be identified amongst those with DCD.

These were:
1. A group of children who had problems with everything and motor skills and particularly in fine-motor skills.
2. Another group with worse fine motor and ball skills.
3. A group with poor motor skills plus poor balance and low levels of perceived ability.
4. Groups with high participation in non motor adult supervised activities.
5. A group with low participation in street or backyard games.

This new classification throws light on the social and participation dimension in the lives of children with DCD. Children with poor movement skills are at risk of falling into a low participation spiral where poor skills leads to low participation which leads to poorer skills which leads to lower participation and lower activity levels and less social interaction.

Current treatments of children with motor difficulties focuses on either improving the underlying capacities of the child, the bottom-up approaches eg (sensory integration or kinaesthetic skills), or improving the child’s ability to perform a specific task, the top-down approaches (motor skills programs, and cognitive-motor skills approaches). Unfortunately the evidence for these approaches is incomplete with some low level evidence for all of them and better evidence for the top-down task-specific approaches (Hillier 2007). Liz Pridham, physiotherapist and DCD researcher at UniSA, suggests that while intervention is preferable to no intervention, there are still questions about the particular components of treatment which are effective and for which children (personal communication, June 2011). As the DECS DCD package (Hillier, Grimmer and Kay, 2008) suggests, it may be some of the more obvious but less acknowledged features of therapeutic intervention which are most effective. Adult supervision, motivation, attention to the problem, good quality feedback and social participation may be the potent factors in any program.
A Hungarian physician, Dr. Andras Peto (1893-1967) challenged the perception held by medical professionals (in the 1950s) with the idea that motor disorders were not medical conditions that needed treatment. He developed the Conductive Education system with the aim of placing people with physical disabilities in society through active learning.

Conductive Education is now recognised worldwide as an effective and very positive way of teaching children and young adults with cerebral palsy. The key focus is that everybody is able to learn and it is not the environment that needs to change but it is the person with the motor disability who has to adapt to the environment. Besides the importance of physical development the academic, social, emotional and adaptive skills development are also embedded into a carefully selected framework called daily routine.

The pictures below show the daily work of the Conductors working with children from various DECS sites.

Active learning in Conductive Education leads students to become motivated through various stretching exercises. Maintaining wide-ranging muscle flexibility is an important part of their physical wellbeing as they grow.

Conductive education teaches how to integrate learnt movements into comprehensive functions that a child has to use in order to be independent. For example, as a child is learning to stand up from a sitting position he/she needs to:

- place feet flat
- keep knees apart
- bend forward
- weight bear on legs
- stand up tall

Children learn best while playing. Their sitting position can be corrected while they are engaged in playful activities which assists them to improve function.

It is crucial that children with physical disabilities are taught to hold onto or let go of objects from a very early age. By improving their grasp children become happier when playing or drawing and safer and more confident when sitting or standing.

Every year a number of goals are established for each learner in agreement with the parents. By setting individual goals the whole team (families, educators and other professionals) know what the learner is working towards and can celebrate their achievements.

“CE has allowed people to see our daughter’s personality. I know that she is in the right environment to develop her confidence and her physical abilities – a positive holistic approach for all our family.” (K. Rechten, Parent).

Kati Balla & Andrea Horvath
Conductors
Special Education Resource Unit
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“Be Fit”, “Get Active”, “Be In it”! These are the current catch cries encouraging us all to be physically active. Despite government funding, as a nation we are having limited success in developing a generation of fit, active and healthy children (and parents).

Obesity, even in children, is at an all time high; ‘screen toys’ are the most sought after past time activities and the threat of litigation is seeing our playgrounds dwindle to not much more than bark chips. Parents are working longer hours, putting more pressure on kindergartens and schools to provide physical play opportunities for children, yet the school curriculum is minimising physical education in favour of academics. When children return home from school, they are increasingly coming home to smaller houses/units with less outside space for play (concrete courtyards abound). Is it any wonder then that we have a generation of heavier, less active children who do not enjoy being physically active?

Why are coordination skills important?
Coordination skills are vital to support not just physical participation in life but also to be successful in academic pursuits. Strong tummy’s and backs allow good trunk control necessary for sitting upright at a desk or even when sitting on the floor (so you don’t flop or lean over objects or classmates). Physical endurance is crucial to help children to pay attention for the duration of the school day, rather than tiring out by lunch time. Strong shoulders are vital to provide a solid base from which the arm and hand can perform precision movements (e.g. writing, cutting, and typing).

What are the building blocks of coordination?
We can’t help but recognise that some children are ‘sporty’, whilst some are not. As children reach grade three or so, the divide widens between these two groups as witnessed on the sporting field. So what is it that makes a child sporty? **Good core strength** (tummy and lower back strength that hold the trunk up with control), which in turn supports good **strong shoulders** that can move the arm in isolation to the body (e.g. throwing a ball, swinging a bat or swimming freestyle). Both these skills imply that the child has **good muscle readiness** to move, **good endurance** for physical play and **good body awareness** (the innate knowing of where your limbs are in space without having to look). **Effective Planning**, how to move your body and at the right time **(motor planning)**, being able to change the movement you are doing rapidly (eg change direction of running, or climbing over an A-Frame) and transferring skills between activities (e.g. playing cricket versus tennis) is crucial in developing good coordination.

How do you identify children with coordination difficulties?
So how do you pick those children that are struggling with coordination? You often get the sense of the ‘clumsy’ children covered in bruises, or who look immature in their movements due to under developed coordination building blocks. Poor body awareness is often a particularly big indicator of coordination difficulties. Those lacking body awareness often invade your personal space, hug or push harder than they mean to, break toys unintentionally, have trouble navigating the classroom such as tripping over classmate’s feet, the furniture or finding an appropriate sized space on the mat into which they can fit.

As a result of well developed building block skills, ‘sporty’ children often have a body that by school starts to looks like a little adult with defined muscle groups evident (rather than looking like a pudgy toddler). They also move with precision and control rather than an immature looking toddler whose movements are loose in nature.

**What can we do to help children with coordination difficulties?**
The great news is that children lacking coordination no longer have to be “just like” mum/dad who weren’t ‘sporty’. We know that with the right kind of activities (and repetition) we can help these children develop the necessary skills to manage life better, and perhaps more importantly protect their self esteem.

Better yet, you don’t need to spend money on expensive resources, but you do need to be well prepared. As fashion and physical play don’t often go together, preparation for physical play starts with appropriate clothing choices. So ensure children wear appropriate clothing: footwear (not ‘Crocs’ or high heeled shoes); no mini-skirts, or excessively long or ‘barely staying there’ pants that require constant pulling up. Once prepared, it is just a matter of using the right kind of activities, and repeating them often and/or long enough to see some basic coordination improvements.

**Activity Suggestions**
Some inexpensive group activities to help develop coordination for school/kindy include:

- **Stepping stones** – use chalk or tape to mark out the ‘stones’ to jump from one to another, ensuring the ‘stones’ are far enough apart that the children can’t step but must jump between them (use dominant foot first, then other foot first, and third time use both feet together).

- **Wheelbarrow Walking** – hold the child by the ankles or knees while they walk on their hands. It helps if the child on their hands separates their legs so that one leg is on either side of the child holding their legs.

- **Balloon Tapping** - have the children tap the balloon back and forth between them, keeping arms up and trying to keep the balloon above shoulder height.

continued
There are movements which impinge upon the nerves with a strength that is incomparable, for movement has power to stir the senses and emotions, unique in itself.

Doris Humphrey

- Ball games – use heavy balls/beans bags rather than light and fluffy ones because the heavier they are, the more body awareness feedback they give which enhances the child’s awareness of their limbs so that throwing and catching with control is easier!
- Walk the plank – walk along a masking tape line, skipping rope or hose without stepping off.
- Jump along concrete slabs/tiles/footpath without touching the lines.
- Floor soccer – position the child half lying on the ground with feet together held up in the air. Have another child (standing) throw a large ball (or even inflatable beach ball) at the lying child’s feet for the child to kick back.
- Kneeling - have two children facing each other to throw and catch a ball or tap a balloon back and forth. However, the children are not allowed to touch the ground when they over balance (instead they must use their tummy muscles to pull back to upright).

**Obstacle Courses**

Obstacle courses are often a very good way of cajoling children who are not enthusiastic about physical activity, as well as extending the duration of participation. In using obstacle courses, don’t underestimate the value of competition, even if it is just against the clock!

Obstacle course activities could include:
- Wearing a back pack with heavy(ish) items (e.g. bean bags). If you don’t have enough to go around, perhaps the ‘leader’ could wear it for a lap before changing leaders.
- Throwing bean bags up in an ideally high up target (e.g. rubbish bin on a cupboard) or failing that into a hoop/chalk drawn target area on the ground.
- Note: You can make bean bags using long grandpa socks half filled with lentils/chick peas, twisted back over themselves then tied up. Commercial bean bags are usually too light and fluffy to provide any body awareness feedback.
- Hopping, Kangaroo jumping or animal walking between stations.
- Kangaroo Jumping (2 feet together) over low objects separated on the ground.

**Further activity suggestions**

Chore based activities that help develop coordination skills include:
- Have children carry their own bags into kindy/classroom (not their parents).

- Anything above shoulder height such as: pinning papers onto the school noticeboard, cleaning off the white/blackboard, placing chairs on the desk at the end of the day, hanging papers/artwork onto a pegging line.
- Carrying a pile of heavy books to the library/front office to ‘give them back’ to the teacher.
- Carrying the lunch order box or toy box.

Of course there are a great many activities that can be done at home or in the community that can be helpful such as:
- Gardening – digging with a spade, raking leaves and lifting into the bin.
- Ride a bike/trike.
- Suspend a ball or balloon in stockings above eye height and hit with a pool noodle or rolled up newspaper.
- Clean house/care windows above shoulder height with a big sponge. Note: if the windows are too low, position the child on their knees so the window is then above shoulder height.
- Push the supermarket trolley for mum.
- Carry the full watering can and water the plants.
- Swimming (not just swimming lessons).
- ‘Hiking’ with a backpack to carry the heavy water bottle and snack.
- Go for a walk in the sand hills at the beach.
- YMCA gym readiness groups, Kindergym, Triskills, Sports clinics, Martial Arts.

In conclusion, many parents and teachers now have to work harder than ever before to give children coordination opportunities. The social and academic culture in which we operate does not sufficiently highlight coordination skills as the important school readiness skills that they are. Children with coordination challenges are at risk of not only compromised self esteem, greater daily fatigue but also academic challenges. Don’t let your students experience these challenges!

*Using the above activities will help children with mild coordination difficulties. But children with more significant issues are likely to require professional intervention by an Occupational Therapist or Physiotherapist.

Joanna Buttfield
Kidsense Child Development
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Imagine yourself as a person who relies on other people or equipment to perform everyday tasks, having no opportunity to move or perform tasks independently. Water provides a place where physical inequities are minimised allowing people with disabilities the opportunity to progress from “Dependence to Independence.”

The Australian Heart Foundation recommends that “Children should participate in at least 60 minutes (and up to several hours) of physical activity each day”. Swimming provides an excellent opportunity for all students to improve cardiovascular function, tone and increase muscle mass, lower body fat and improve pulmonary function all supporting the promotion of healthy growth and development.

Swimming and movement in the water specifically benefits children with disabilities, with water providing a soothing, positive and safe environment to access physical activity.

- The gentle pressure of water on the body and the emphasis on repetitive motion that swimming provides, helps to calm some students, reducing anxiety that would normally be associated with physical activities
- Pain created through tight and painful joints and tendons is relieved and relaxed through the gentle stretching that naturally occurs when exercising in water
- Weight bearing exercises to build strong bones and muscles, such as running and jumping, stresses joints when performed on land and can be painful and often not achievable. Performing these activities in the water has a low impact on joints and generally has little or no associated pain and is often achievable in the water
- The water environment assists students with core muscle development improving balance and posture while also providing a safety buffer for any child who falls while developing these skills
- Students’ disabilities are minimised and they can enjoy being “normal” and have the opportunity to participate at a level equivalent to their peers, providing the opportunity to make friends and improve self esteem.

The DECS Students with Disabilities Extended Swimming & Water Safety Program supports approximately 3,000 students to access weekly swimming lessons at approximately 40 swimming centres statewide. The program is curriculum based and clearly links all learning outcomes with the SACSA Health & Physical Education Framework.

Individualised Learning Programs are developed to meet the skills and learning needs as defined in the NEP of each student. The Students with Disabilities Resource Kit, on the Swimming & Aquatics Website, provides a suite of activities to support all levels of learning outcomes.

For some students this may be the only time in their week that they are able to move from one place to another without the support of someone else. Imagine the pleasure and sense of independence that this brings to the student.

To access this program the following 3 criteria must be met.

The student(s):
1. must be “verified” (Verification Form ED040) for a level of support (Level of Support Form ED040) and appear on the statewide “Students with Disability Database”;
2. can only achieve successful outcomes identified in the SACSA framework for H & PE in the water environment,
3. has a Negotiated Education Plan identifying swimming as a means to achieve specified learning outcomes related to the H & PE learning area.

If you believe your student(s) meet the 3 criteria and wish to access the program, go to the “7 Step process to verify eligibility for the SWD extended water safety program” through the Swimming & Aquatics website. www.decs.sa.gov.au/swimmingandaquatics

A session will be held at The Special Education Expo 2011 to provide an opportunity for schools to learn more about this program (11:30am Wednesday 13th July, 2011).

Debbie Wright
Operations Co-ordinator, DECS Swimming & Aquatics Unit
Ph 82261301
Move To Learn is a program created by teacher Barbara Pheloung and associates. It is a simple and sequenced movement program which follows the stages of human development in the preschool years.

Barbara explains that the way we develop as babies generally follows stages and an ordered sequence. The correct order is important in a child’s development and so too is a sufficient length of time. For example, to copy from the board a child needs to have crawled properly for six months and learned to focus from the floor to the distance. Rolling, rocking and crawling all help develop brain integration. Moving and learning go together. Children who have missed or partly missed stages often seem to struggle academically and patterns of immaturity in those struggling are evident. These children have problems with what the brain does with messages it receives. It appears that they do not receive accurate information about the world. It takes a variety of professionals working together to support children with learning difficulties.

Bellevue Heights Primary School has a NAP (New Arrivals Program), and some of the children are refugees. It was noticed that some children are simply not ready to learn, are unable to concentrate and some had post traumatic stress, behaviour and social issues. One student in particular had ongoing trauma issues and would have uncontrolled outbursts. Staff all participated in the Strategies for Managing Abuse Related Trauma (SMART) training and so were aware of the affects of displacement, attachment issues, trauma and grief. We were looking to help prepare these students for learning, and to improve their short term memory and their ability to concentrate. Due to their environment and personal circumstances some refugee children miss or partly miss early stages of development and have not enjoyed positive, trusting relationships. Some have never been to school and haven’t had the experience and practice with writing letters and numbers, and don’t know right and left directions. Opportunities to play with balls and puzzles; use swings and play equipment, cut and colour and develop language and grammar may have been minimal or non-existent.

The Move To Learn program was first tried with a small selected group of refugee children who had been at our school for some time, whose progress had been very slow and particularly whose short term memory seemed very immature. It was easy to implement the program as no equipment is required, and the space was made available. Training was completed through reading and a DVD. Anecdotally teachers enthusiastically commented on student improvement: in self confidence, friendships, coordination, writing and reading levels. The SSO also reported improvements in behaviour, coordination, concentration, listening and working together as a team. He has received positive feedback from both staff and students.

There are now 2-3 groups per term, three times a week, 30 minutes a session. The group size is eight to ten students and it now includes students from NAP and mainstream. These are students with learning difficulties, children who have completed the early years co-ordination program but still need more, students on NEPs and students who have been referred to the schools LST (Learning Support Team). The children learn the nine steps, which generally takes about a month. This requires careful listening, following instructions and real focus to hold the positions. It also promotes a sense of personal space. Three SSOs (School Service Officers) /BSSOs (Bilingual School Service Officers) have now been “trained” and all teachers have been given information about the program and its benefits. One teacher was very pleased with the benefits for her students and so incorporated aspects of the program in her daily fitness and morning “wake-up” session.

One of the most rewarding aspects of the program has been seeing the calming affect it has had on the children, particularly those who may still be in a state of hyper-arousal or anxiety. They seem to sense themselves that the movements are benefiting them.

For further information, books and DVDs: www.movetolearn.com.au

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The Nine Steps

1. Rolling
2. Gliding on Stomach
3. Unilateral Flip Flops
4. Cross Pattern Flip Flops
5. Stomach Crawling
6. Rocking
7. Unilateral Crawling
8. Cross Pattern Crawling
9. Pattern Walking
The Minimal Motor Dysfunction Unit (MMDU) forms part of the Neurodevelopmental Physiotherapy Unit at the Women’s and Children’s Hospital (WCH). The Neurodevelopmental Physiotherapy Unit also provides outpatient physiotherapy assessment and treatment services for neonates, infants and preschoolers.

The MMDU is primarily an assessment and treatment service for school aged children with gross motor difficulties. This service has been operating through the WCH for over 25 years. Whilst the structure of the Unit has undergone several changes in that time, its essence has remained fairly constant. The MMDU is staffed by two part-time physiotherapists and a paramedical aide. The focus of the unit is to provide a thorough neurodevelopmental assessment of the child that has been referred; and then to decide on the management required for that child based on the assessment findings. The MMDU assessment process is open to school aged children from 5½ to 17 years of age.

To be eligible for referral to the MMDU the child must be of school age and be displaying gross motor skill difficulties. The child’s cognitive abilities, language comprehension and behaviour must be within normal limits. Whilst the vast majority of children who are referred to the MMDU have movement and coordination difficulties that are consistent with a diagnosis of Developmental Coordination Disorder (DCD), a smaller proportion of the referrals received are for children with coordination difficulties that relate to a medical condition such as a cardiac, metabolic or blood disorder.

By definition Developmental Coordination Disorder (DCD) is a term used to describe children who have difficulties with movement and the coordination needed for everyday tasks, that is not due to a medical condition (Diagnostic and Statistical Manual IV, DSM IV). That is, children with DCD are otherwise healthy and of normal intelligence but for reasons not yet known they have significant difficulty performing gross motor activities such as running and hopping. A child with DCD may also exhibit fine motor difficulties that affect tasks such as writing or scissor skills. In addition, they may have speech and language issues and/or learning difficulties, and they can also experience emotional and behavioural issues, often due to the frustration they have around their difficulties.

Whilst the aetiology of DCD remains unclear, the incidence of the disorder is relatively common affecting between 6 and 10% of school aged children. It tends to occur more frequently in boys in a ratio of 3:1. A child with DCD can perform physical skills but their movement tends to lack quality and frequently appears ‘floppy’ or ‘heavy’. DCD can be subtle in its appearance but indicators can include a child who finds it difficult to participate in physical skills, is cautious and reluctant ‘to have a go at tasks’, complains of feeling sick when it is time for Physical Education sessions or who prefers to play with younger children who are often more tolerant or accepting of the child.

The majority of children assessed through the MMDU have low muscle tone (that is reduced resting tension in their muscles) and poor postural control (trunk stability). The impact of this is that the child lacks adequate functional strength and the endurance to perform tasks efficiently. The child usually fatigues quickly and struggles to keep up with their peers. It is not uncommon for a parent to report that their child appears ‘exhausted’ by the end of the school day.

The presence of DCD can become more apparent as the child develops and contrary to the belief that a child will ‘grow out of it’ it is only through intervention and structured learning that a child’s gross motor skills can and do improve. It may be the teacher who is the first to notice that a child is struggling to keep up with their peers in the playground. The physical difficulties experienced by a child with DCD may lead to poor self esteem, reduced motivation and poor confidence. It is important to point out that DCD is a chronic condition that occurs in different degrees in each individual and persists though adolescence and adulthood. Early intervention and treatment is essential to help reduce the physical, emotional and social consequences experienced by the child.

Children can be referred to the MMDU either by a Paediatrician or GP. A proportion of the referrals received by the MMDU also come through the Child Development Unit (CDU) at the WCH. The majority of referrals describe children as having difficulty with coordination, being ‘clumsy’, ‘falling frequently’, ‘struggling to keep up with their peers’ and/or ‘tires easily’.

Once assessed through the MMDU, the factors impacting on the child’s movement difficulties will be identified and an impression of the child’s presentation is formed and where appropriate a diagnosis is given. Factors impacting on a child’s movement may include low muscle tone, poor balance, difficulties with motor planning (ability to organise and sequence a task), decreased coordination, immature proprioception (body awareness and the ability to fine tune movement without the aid of vision), poor control of speed or ‘grading’ of movement, and reduced functional strength and poor endurance.

Assessment of the child’s joint range of movement and posture is also essential to completing a thorough evaluation of the child. Any relevant musculoskeletal findings are noted and considered in the treatment planning.
Findings are discussed and explained to the parent or carer immediately following the assessment. Recommendations for treatment of the child’s gross motor difficulties are then made. Around 80% of the children assessed through the MMDU are recommended to attend the MMDU gross motor group programme.

The MMDU programme incorporates a variety of approaches to manage gross motor skill difficulties. Treatment is in small groups ie. between 6 and 8 children per group. Children are placed in groups according to their age (ages 6-9). This programme is run over a semester and sessions are held weekly. Sessions run for one hour each week, with the expectation that short but frequent practice sessions occur at home. Parents are an important part of the programme and attend with their child each session. This allows for important social contact with other parents who have children with similar issues. It also allows staff to teach parents how to teach the skills to their child. Parents work with their child for part of each session and are taught how to ‘break skills down’ to assist their child to plan and execute a task in steps before having to put it all together. This is done using simple key words to help prompt the child to ‘think through’ the task.

For example, a child who finds the task of catching a ball difficult, the use of simple key words such as ‘watch,’ ‘reach’ and ‘catch’ can assist the child to begin to plan and coordinate the task. This is commenced with the child in a seated position using a large soft ball. This assists the child to focus on the ball, reduces the degree of difficulty and enhances the child’s success. As the child achieves success, the task is progressed to ‘catch in standing’ and the size and distance from the ball can be varied. The child’s success then leads to improved motivation and greater confidence to try.

Following a semester with the MMDU programme the children are reassessed using a standardised gross motor test known as the Test of Gross Motor Development II (TGMD II). This test is considered the most useful for its speed and simplicity of use, and because a child’s strengths as well as their difficulties can be drawn from the testing. This helps to aid recommendations about ‘where to from here’ for parents and their child. A key ingredient to the ongoing success and positive experience with physical activity for the child and their family rests with ‘matching’ the right activity for the particular child with their strengths and area of interest.

Liaising with teachers and the child’s school is an important consideration to a child’s involvement and subsequent support and overall success in the programme. A parent teacher information evening session forms part of the timetable for the group attendees and allows for greater explanation of the child’s difficulties to teachers interested and able to attend. The information evening, which can be included as part of the professional development content for teachers, enables face to face contact between the child’s physiotherapist and teacher and an opportunity for health and education to link. A copy of the group activities to be taught during the MMDU programme is provided for the child’s teacher at the start of the semester and many schools incorporate the activities into their own physical activity sessions.

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**Enhancing Learner Wellbeing, Incorporating a Sensory Approach**

In 2008 and 2009 The Briars undertook a learner inquiry as part of the “Healthy Eating and Physical Activity in the Early Years Project”. At the time, the project was in line with The Briars site directions, namely “to improve children’s learning through a focus on engagement and well being.”

The project provided us with the opportunity to consult with the staff and our families to help identify the focus for our inquiry. We also took the opportunity to undertake the relevant professional learning. We shared the outcomes with colleagues and parents as well as introducing additional innovative practices to improve learning outcomes for our students.

The core business of The Briars is to provide an appropriate inclusive and supportive teaching and learning environment for all the children and their families. The Briars has a focus on sensory based learning and the centre is purpose built incorporating sensory learning equipment and practices. Prior to the project we were aware that many of the children attending our centre presented with challenges regarding healthy eating and physical activity that impacted on their general well being. For example, some children have very limited diets and refuse to try other foods. Many children with disabilities have sensory processing difficulties which may impact on their learning and attention. Some children are very active and some have limited mobility. Some over react to their environment and some under react.

Due to the wide range of developmental needs and complexities of the children attending the site it was agreed that the over arching inquiry question should be broad. The question we explored was: *How do we promote Healthy Eating and Physical Activity at The Briars to enhance children’s well being?*

**A bear, however hard he tries, grows tubby without exercise.**

A.A. Milne

*continued*
We wanted to explore the impact of sensory processing on engagement and well being. We believed that sensory processing impacts on all learning and we wanted to know why? We also wanted to know what sensory issues we should address to enhance children’s engagement. I would like to share some of what we did in particular in relation to physical activity.

Rebecca Fergie and myself were extremely fortunate to attend two workshops (Adelaide and Sydney) over three days run by Genevieve Jereb. Genevieve is an Australian born paediatric occupational therapist of national and international acclaim who has worked collaboratively with leading practitioners in the United States. She is also a talented musician who has produced CDs which incorporate the principles of sensory processing. We purchased some and have found them very useful and fun (see references). The title of her workshop was *Getting Kids in Sync*. Genevieve presented to us an overview of Sensory Integration and Sensory Dysfunction. The Theory of Sensory Integration is based on the work of Dr Jean Ayers (1979) who described “Sensory Integration” as “the organization of sensation for use”. Yack, Sutton and Aquilla (2002) describe it well: (2002,p21)

“Sensory integration is a neurological process that occurs in all of us. We all take in sensory information from our bodies and the world around us. Our brains are programmed to organise or “integrate” this sensory information to make it meaningful to us. This integration allows us to respond automatically, efficiently, and comfortably in response to the specific sensory input we receive.”

Sensory Dysfunction will occur where the flow of sensation is disorganized, inefficient and not integrated. The brain has difficulty using sensations to form perceptions, behaviours and learning. Of particular interest was the “Pyramid of Development” described to us by Genevieve and developed by Taylor and Trott (1991). Genevieve referred to Mary Sue Williams and Sherry Shellenberger (the Alert program for self regulation) “If, in the central nervous system, those seven sensory systems are adequately registering and processing information, all *sensorimotor development will be supported*” (Williams and Shellenberger “The leaders Guide-How does Your Engine Run”). Therefore the integration of the sensory systems is the prerequisite for all higher level skills. Genevive emphasised that we must not begin or work too high on the pyramid if the foundations /building blocks are not in place or are “Out of Sync”. This was a strong message.

Inspired, we returned to The Briars keen to put some practical measures in place for our students. We decided to develop a daily circuit which targeted the heavy muscle work known to provide *proprioceptive input or deep pressure to the muscles and joints*. We wanted to see if regular access to such activities, along with encouraging deeper breathing, could improve attention, learning, regulation and behaviour.

**THE CIRCUIT**

We established a heavy muscle work circuit regularly with our children who attended on a Tuesday. The physical skills and abilities of the children varied and included extremely active children as well as some who were non walkers but able to sit independently and could be encouraged to crawl and roll. We set aside an indoor area and used equipment to encourage heavy muscle work such as crawling, pulling, jumping, weight bearing, rolling and crashing onto a soft, safe surface. The children were initially guided through the circuit with one to one support and matched at similar levels of learning needs. We incorporated visual cues including photos and compics which were placed at each station of the circuit to enhance understanding of the expectations and routine.

Music was played to match the activities such as some drumming music for the circuit and some quieter music for the calmer activity at the end. We used music recommended by Genevieve Jereb and available for purchase from her website [www.sensorytools.net](http://www.sensorytools.net). The warm down activity at the end of the circuit was very important.
We sat the children in bean bags facing a mirror to enhance their self awareness and encouraged them to learn to inhale and exhale. Genevieve had explained that to increase the inhale (for deeper breathing) you need to increase the exhale. This was a great strategy! We purchased a variety of blowing toys which the children enjoyed and I was surprised at how well some managed. The music chosen was slow and rhythmic like Baroque music to slow the body down and increase a state of calm alertness.

As a result of the regular circuit positive outcomes for our students were gained. The children were often calm and more alert after each session. Some children sustained higher levels of co-operative play after the session. Some parents reported that their child was also calmer and more settled at home. We saw relationships build with peers as games emerged such as “I’m stuck in the tunnel help me out”. Children increased their body awareness, physical competencies and alertness. Through regular participation children developed increased motivation and independence in participation. Such evidence was documented through learning stories, written reports and DVD footage all shared with the families. The whole staff team were very supportive. Heavy muscle work activities were planned and initiated spontaneously throughout the day along with more blowing activities. It was important to keep the activities simple and fun.

Some key findings that impact on the success
- Sharing the learning with other staff and the families to create more awareness and increase opportunities for the children to be exposed to the activities to maximise the positive outcomes for children.
- Incorporating the visual cues to enhance communication and learning.
- Educators need to review the routines and adjust to individual children, incorporating their interests and strengths.
- It is important to repeat the routines regularly so the children can predict in what they are going to participate; increasing their confidence and independence.
- Allow children time to process the information and self regulate their responses.
- Choose music carefully, appropriate to activities and to individual children.
- Adults modelling and being involved increased children’s participation and enhanced trusting relationships.
- Of course continually observe, reflect and adjust.

I would definitely encourage people to consider including heavy muscle work activities and the possibility of a regular circuit to increase learner engagement and well being. Good luck!

References
Website: www.sensory tools.net
Useful website: Co-ordinates Therapy Services www.therapybookshop.com

Jane Mellows
Teacher, The Briars Special Early Learning Centre
Ph 8365 9808

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Some of the visual cues used

The Circuit Room

The Warm Down Activity
Motor coordination is the control that infants and children have over the movements that help them to master their environment. In the normal developmental sequence, gross motor coordination develops first and continues into mastery of smaller refined movements. Gross motor coordination involves the larger muscles and joints in overall body movements such as crawling, standing and walking. Fine motor coordination involves the refined movements of smaller muscle groups and joints, such as wrists and fingers. Each motor skill is a building block for the next more coordinated and refined movement e.g. a fine motor task such as grasping requires that head and shoulder postural control has developed and is active whilst the child reaches and grasps at the same time.

As motor coordination develops children are able to interact with their environment in new ways. Well-developed motor coordination allows children to communicate and make bonds e.g. moving to parents for hugs, pointing to share interest or to request a toy or an object and sharing in games. Motor coordination allows for the development of emotional and social interaction, cognition and language; e.g. reaching and grasping plays an important role in cognitive development because it is the means by which we explore our environment. By grasping, touching and turning objects babies learn about the objects’ sights, sounds, feel and function. Motor coordination therefore contributes to a child’s overall function in important childhood activities such as playing, eating, dressing and building meaningful relationships. If a deficit exists in motor coordination, other performance components and overall functional performance may be affected.

There are a range of conditions that may affect the development of motor coordination; they include genetic and degenerative disorders, congenital or acquired disorders as well as neurodevelopmental disorders such as Autism. Motor coordination is often impacted in children with Autism, in part because children with Autism have atypical responses to sensory stimuli. Because the brain depends upon effective processing of incoming sensations in order to establish sound motor function; poor interpretation of the proprioceptive (body awareness) sense in some children who have Autism means that they may appear clumsy, may have poor postural control and lean on furniture or people, or may have motor planning difficulties.

Motor Coordination difficulties may also present as difficulty starting or finishing an activity or dysfunction of breathing, swallowing, chewing, sucking and blowing due to poor coordination of postural, respiratory, mouth, tongue and throat muscles. Motor coordination issues may also result in slowness in everyday tasks like dressing, difficulty self-correcting, becoming easily frustrated and/or avoiding tasks that are challenging as well as requiring more time to learn a new task. Children who present with low muscle tone for any reason (floppy muscles/weak fingers/slumping when seated/weak grasp), may also demonstrate decreased coordination as a result. These difficulties will affect children in many areas of their life. It may affect their general ability to move around and get from one place to another and their performance in self-care tasks - e.g. the ability to use two sides of the body in a coordinated manner in order to get dressed requires the child to balance on one leg while coordinating two arms to hold trousers whilst lifting the foot to put it through.

Coordination difficulties may impact on a child’s ability to maintain sufficient postural control whilst using arms, hands and fingers to colour, trace, paint, or use play dough on the mat or at the table at kindy. Imitation of feet, leg, arm, hand and finger actions in songs and games with other children will be a challenge. It may also impact outdoor games and activities as motor coordination difficulties will affect a child’s ability to coordinate both sides of their body to run, jump, throw and catch balls or climb playground equipment. Because of the myriad of important areas motor coordination difficulties can affect, it is imperative that they are assessed and addressed.

References
Autism SA (2001), Brochure – “Fine motor skills”, Adelaide, South Australia
Berk, L. (2006), Child Development (7th Edn.), Pearson Education, USA.
OT Australia SA, Brochure – “Planning movements”, Occupational Therapy Association of South Australia, Adelaide, South Australia

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The human body is made up of some four hundred muscles; evolved through centuries of physical activity. Unless these are used, they will deteriorate.

Eugene Lyman Fisk
Mobility Opportunities Via Education (MOVE) is designed to use education as a means to systematically acquire motor skills, in particular sitting, standing and walking. In 2008 Adelaide West Special Education Centre (formally Regency Park School) and Elizabeth Special School initiated MOVE with a small number of students as a pilot. The ultimate aim was to have all students that were eligible for the program incorporated and working towards their goals. MOVE has helped these students strive to reach their full physical potential by working towards functional goals (set by their families and supported by their teachers) through integrating mobility skills into their education. MOVE has provided the students with opportunities to become more actively involved in home, school and community environments.

The MOVE program is closely linked to Rifton products, including gait trainers, standers, toileting stations and specialised chairs, which are the main pieces of equipment used in the program. These products are adaptable and the amount of support can be easily reduced when the student develops and refines their motor skills.

Linda Bidabe, a special education teacher who lives in Bakersfield, California, is the founder of MOVE and author of the curriculum. She reflects our belief that: “... people with severe disabilities can achieve mobility one move at a time.” In Linda’s words, “MOVE is a result of years of testing, trials, research, patience and faith that people with disabilities can gain or regain mobility. It represents care and concern by teachers, trainers, physiotherapists, parents and caregivers who are committed to moving people with disabilities from a restrictive environment to a more inclusive lifestyle.”

The students, families and teaching staff at Adelaide West and Elizabeth Special School are seeing remarkable results through MOVE. Both schools have completed 17 assessments. All assessed students have made significant improvements in their physical development in standing, walking and sitting, which has lead to clear improvements in engagement, and success during class time, meal times and toileting.

Students at both sites are creating their own MOVE momentum. They are:
- taking reciprocal steps in their gait trainers and walking towards someone or an object that is of interest to them
- leaving their gait trainers behind and walking unaided
- weight-bearing for longer periods of time, therefore assisting with transfers and dressing
- leaving their wheelchairs outside the classroom and sitting in specialised seating or regular classroom chairs
- learning to stand from a sitting position, using either one hand or two, and then sitting back down, in a regular classroom chair, or in some instances a toilet, eliminating the use of a hoist and/or a two-person lift.

Students, families, teachers and other paraprofessionals are certainly seeing the results of MOVE, and the Top-Down Motor Milestone Tests and associated data prove it. Without MOVE, we would struggle to find a way to test and collect data on what students can and cannot do, which makes it difficult to gauge improvements. Before MOVE most students had pieces of equipment but there were no real goals in terms of what the students could and would achieve after months/years of using them. MOVE now gives students, families, teachers and other paraprofessionals a purpose and goals to work towards.

In order to teach MOVE effectively, we work through six steps:

**Step 1**
Testing: we test students using the Top-Down Motor Milestone Test from the MOVE curriculum.

**Step 2**
Goal setting: by talking to parents/caregivers, we pinpoint activities that are important to the student and family, both now and in the future.

**Step 3**
Task analysis: we focus on the skills required to complete the activity the student and/or family identified in Step 2.

**Step 4**
Measuring the prompts: we identify what supports students need to be able to perform the activities.

**Step 5**
Reducing the prompts: we work towards reducing supports as students gain more mobility.

**Step 6**
Teaching the skills: identifying when the skills will be taught, how to teach them and what equipment (if any) will be used.

In her words, “MOVE is a result of years of testing, trials, research, patience and faith that people with disabilities can gain or regain mobility.”

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**Jordyn Salotti uses a dynamic stander to move from one place to another, instead of someone pushing her in her wheelchair. Here she independently self-propels to select a book that interests her.**
Families at Adelaide West and Elizabeth Special School have been proactive in supporting MOVE. During the interview process families identified sitting, standing and walking as the most important skills needed for everyday activities at home. These skills are necessary for their children to participate in regular family activities, such as: walking to the park, or to the car; sitting on a regular chair to eat a meal, at home or at a restaurant; walking from one room to another so that a wheelchair is not required; and standing for longer periods of time to assist with dressing and transferring.

A student at Adelaide West recently surprised herself when she learnt to independently move to a standing position for toilet transfers from her electric wheelchair with the support of a Return stander. For many years this young girl had relied on a sling and hoist to lift her. At times members of her family would lift her without the sling and hoist, putting both themselves and her at risk of injury. It was the student’s goal to complete a standing transfer without the use of a sling and hoist. She wanted to achieve this so she could spend more time with her grandparents during school holidays. A hoist did not fit in their toilet area and they were not strong enough to lift her from her wheelchair for toileting, preventing her from spending long periods at their home. It took the student two to three months to learn to complete a standing transfer and she now spends school holidays at her grandparents’ home.

The best part about MOVE is that students are making clear and visible improvements, not only in their physical development but also in their ability to communicate, their emotional wellbeing, their social interactions and their academic achievements.

How can we deny any child their right to move? In Linda Bidabe’s words, “We learn to MOVE so we can MOVE to learn.”

Jackie Butler
Special Education Teacher / MOVE International Trainer (MIT), Adelaide West Special Education Centre

Megan Palmer
Special Education Teacher / MOVE International Trainer (MIT), Elizabeth Special School
CATERING FOR STUDENTS WITH CO-ORDINATION AND SENSORY NEEDS AT BRAEVIEW JUNIOR PRIMARY SCHOOL

Braeview Junior Primary School is located at Happy Valley on a co-located site with Braeview Primary School. The JP has a current enrolment of 167 students across Reception to Year 2 of which 12% are students with disabilities and 20% of students receive additional support. In addition there is an R-2 Special Options class with 8 students. The school has designated early childhood leaders who are strong advocates for the education of young children.

The Early Years Literacy and Numeracy Plan describes the commitments taken at our school to improve literacy and numeracy outcomes for all Reception to Year 2 learners. There are five key elements of this plan:

- whole site commitment and focus.
- effective teaching and learning.
- professional learning and leadership.
- working within community.
- effective use of evidence and data.

Within the context of the key element, Effective use of evidence and data, there is a focus on the implementation of a range of additional support programs, including:
- NEP & Students with Additional Needs (SwAN) class based support
- Chatterbox
- Buddy Reading
- The Listening Program
- Sensory Motor Program
- Fun & Games
- Yr 1, 1-1 intervention

All of these early intervention programs are underpinned by the following shared understanding and beliefs about child development as represented in this diagram:

(Catering for Students with Co-Ordination and Sensory Needs at Braeview Junior Primary School)

The school aims to provide a range of intervention programs across the “triangle”:

<table>
<thead>
<tr>
<th>Cognition/Intelllect: Academic learning; complex motor skills; regulation of attention; independent organised behaviour; social behaviour; self esteem; self control; self confidence</th>
<th>Social skills Learning Assistance Program (LAP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceptual Motor Development: Auditory language skills; visual spatial perception; eye hand co-ordination; visual motor activity</td>
<td>Yr 1-1 program Chatterbox Clubs NEP and SwAN support in class Buddy reading</td>
</tr>
<tr>
<td>Sensory Motor Development: Body awareness; bi-lateral co-ordination; hand preference; motor planning; postural strength, balance, reflex maturity</td>
<td>Fun and Games</td>
</tr>
<tr>
<td>Sensory Systems: Visual processing; auditory processing; tactile, vestibular and proprioceptive sense; olfactory; gustatory</td>
<td>The Listening Program Sensory Motor Program</td>
</tr>
</tbody>
</table>

(Referenced from: OT Therapy For Children, D. Manillo).
THE FUN AND GAMES PROGRAM
This program based on the SA Motor Program, provides a series of structured, fun, physical activities to support students diagnosed with gross motor coordination difficulties which may impact on later learning and engagement in class programs.

Targeted students: Students who may be experiencing difficulties with particular gross motor or fine motor tasks are targeted for this program. The program arose from local SA research which indicated that children with poor coordination skills are more likely to experience later difficulties with their learning. Early intervention to remediate coordination difficulties has proven to be beneficial for these children as they develop a range of motor skills and physical activities.

Expected outcomes for students: Additional benefits and achievements include listening and social skills, self help and independence skills.

Operation: The program is operated by an SSO. Children participate in 3 half hour sessions per week, following the set SA Motor Program of activities in conjunction with sensory based activities and equipment which enhances the learning program for the children. Generally children will remain in the program for one term but this may be extended if required. Each session aims to help develop individual skills in a climate of fun and co-operation. Children are encouraged to ‘have a go’, listen to instructions and wait their turn. Each session involves 3-4 activities focusing on developing gross motor skills. This includes activities such as: using hoops, children move to music then stop when the music stops – they are then given an oral instruction about placing their body using spatial terms and concepts; balance beam and ladder for balance activities; using gym balls for rolling, bouncing, balancing; pool noodles are used for developing upper body strength.

Identification of eligible students: Students are assessed during their first term at school on a standardised (SA Motor program) assessment using 5 key motor skills. Students are re-assessed after 10 weeks in the program to determine progress.

Pre and post data collection and analysis: All Reception students are screened within their first year at school pre and post program using standardised data.

SENSORY MOTOR PROGRAM
Sensory integration is the ability to take information through senses (touch, movement, smell, taste, vision and hearing) to put together with prior information, memories, and knowledge stored in the brain, and to make a meaningful response. Sensory integration occurs in the central nervous system and is generally thought to take place in the mid-brain and brainstem levels in complex interactions of the portions of the brain responsible for such things as coordination, attention, arousal levels, autonomic functioning, emotions, memory and higher level cognitive functions. Difficulty in processing and organising sensory information causes dysfunction. This dysfunction may manifest itself in attention and regulatory problems and sensory defensiveness.

Expected outcomes for students: Students show a greater ability to order and process sensory information which would be indicated through learning data collected and teacher and parent perception data. Results from the program indicate that students have improvement in body position, posture and movement, improved motor quality, control and planning and an increased ability to master physical skills and self regulate their nervous system. Secondary improvements can be observed in a child’s social interactions with their peers (including tolerance and balance of emotional reactions in social situations), self esteem and their alertness in the classroom which includes on task behaviour and impulse control.

Identification of eligible students: All Reception students are given a perception assessment by their class teacher at the end of their first term at school; eligible students are screened using a specifically designed tool and covering gross motor skills, fine motor skills, proprioception, visual, tactile, vestibular and auditory. Of significant focus in our school based program are the areas of PROPRIOCEPTION and VESTIBULAR. A priority of access system is in place to assist in allocating students.

Operation: Identified students receive 2 x 30 minute sessions per week with a trained SSO. Each session consists of 4-5 activities including a warm up based on the principles of Brain Gym and a cool down at the end of the session. Activities may include deep pressure work, heavy work, unilateral and bilateral activities, spinning, fit ball activities and core strength work.

continued
Pre and post data collection and analysis: Identified students are assessed using means tested data in the 7 areas. Post data is collected after break of one term after one term of involvement in program.

Early intervention to remediate coordination difficulties has proven to be beneficial for these children as they develop a range of motor skills and physical activities.

Expected outcomes for students: Additional benefits and achievements include listening and social skills, self help and independence skills.

The Fun and Games Program and The Sensory Motor Program work in collaboration to provide for students an opportunity to further develop their sensory systems and motor development. Children at our school can access either or both of these programs as necessary. Each program achieves results as a stand alone program or complimentary results should a child need support in the remediation of co-ordination difficulties and the ability to process sensory information. It is important to acknowledge, however, that the Sensory motor Program is NOT therapy and that for some students there is limited progress as their sensory needs are far greater than we are able to cater for. It is recommended to parents of these children that they should consider Occupational Therapy.

The Hopperoos Programme

In September 2006, a parent and teacher from Forbes Primary school attended an information session at the Minimal Motor Dysfunction Unit at the Women’s and Children's Hospital. This session was in support of a child who had attended this program and several years of Physiotherapy and Occupational therapy groups. The session included strategies for identifying children with gross motor delay and information for overcoming those delays. A few days later, at Forbes Primary School sports day, the SSO and parent were observing the students participation and identified numerous children who displayed mild to moderate gross motor delay. After discussion with staff and parents it was decided that the school would benefit from a gross motor development program.

In February 2007, a Foundation Movement Skills program (FMS) called “Hopperoos” was introduced for junior primary students. This program provides all children, including those with gross motor delay, essential development and physical skills to enhance their learning and promote an active lifestyle. It has also been shown to improve their social interactions and emotional well being. The program provides the opportunity for the children to grow holistically, which enables them to be successful in aspects of their learning and lives.

In 2009, the Hopperoos program was expanded to include a partnership with the University of South Australia, Physiotherapy Department. By the end of 2011, Hopperoos will have provided clinical experience for over 30 physiotherapy students, providing them with valuable experience with all children, including those with motor delay, in a group setting.

In 2010, the Hopperoos program was introduced to Harcourt Gardens Preschool, now Forbes Children’s Centre. This expansion of the program has highlighted the benefit of providing young children with specifically targeted physical opportunities.

In the current Hopperoos Program children are provided with gross motor development programs using games, exercises and physical activities based on a variety of programs and interventions. Junior Primary students are tested under strict guidelines and conditions. The results for each test are compared to rating categories for differing age groups. Cut off points are categorised from very low, low, medium, high and very high. This test helps to identify the individual child’s strengths and weaknesses in each of the fundamental movement skill areas. Together with teacher and family consultation the children are placed in the Hopperoos Program - a group intervention to target gross motor skill development and physical activity.

It is exercise alone that supports the spirits, and keeps the mind in vigor.  
Marcus Tullius Cicero
Fundamental movement skills are the movement patterns which involve different parts of the body, e.g., arms, legs, head, and trunk. They are foundation movements which can be built upon to make more complex skills required in play, dance, games, sports, etc. Research indicates that the increase in foundation skill development leads to increased confidence and participation in physical activity.

The 3 areas of focus for the program are:

1. Body management – this involves balance in stillness and motion (balance, line and beam walk, climb, forward roll).
2. Locomotion – this involves moving the body from one place to another (sprint run, hop, jump, skip, gallop, side step, dodge, leap).
3. Object control – this includes controlling objects or implements by either hands or feet (catch, throw, pass, kick, hit, hand dribble, foot dribble).

Children are assessed on the successful completion of each task as well as how they performed the task in a meaningful way. Children who are identified as having poor foundation movement skills are provided with the intensive movement skills group program. This involves attending 2 half hour sessions each week.

These sessions will include:
- Opportunities for children to learn the FMS required to participate in physical activities.
- Activities that connect and challenge participants through the provision of physical demonstration, modelling and setting up the environment to provide stimulating, meaningful learning experiences of physical activity.
- Opportunities to act and reflect, time to develop and apply FMS and time to discuss skill performance.
- Opportunities to develop individualised experiences through modified activities to meet individual ability, graded/adapted equipment and graded activities that assist the development of speed and distance for individual children.
- Opportunities for children to work independently and collaboratively.

The program is managed by a program Coordinator who is employed at SSO rates through successful applications for various grants including the Healthy Australia Grant, from the Department of Health and Ageing, and The Schools First Award, through the National Australia Bank. Activities are adapted/modified or changed each session to give the children a variety of experiences while obtaining the same outcome.

This will help ensure that children remain enthusiastic and excited to get the best outcome. The activities include running and dodging games, obstacle courses, use of playground equipment, throwing and catching games and coordinated movement to music. More specific activities include somersaults, rolling, hurdles, jumping games, parachute games, balance beam, sack races, ball games, scooter boards, climbing equipment and running activities. As Forbes Primary School has a swimming pool we have also used water exercise and games in the warmer months to increase strength and balance.

The aims of this project are to increase Foundation movement skills in children aged 4 – 8 which will lead to increased participation in physical activity. These aims continue to be achieved, with improvements made in skills, strength and body control.

After school sporting activities have been full each term, indicating the children’s desire to participate in physical activities. Recess and lunchtime activities at the school have indicted the increase in physical activity. There are many more junior primary children participating in tennis, handball, soccer, basketball, etc at these times. Junior Primary children are becoming more confident in using the equipment in the yard. Through this program we have been able to identify a number of children who did not play on the playground. We have been able to work with these children to overcome their reluctance and enable them to participate fully in playground activities.

The children have also improved in other aspects of their development. It has been clear from parent and teacher surveys that the children have gained confidence, self esteem, interpersonal skills and many other important personal development skills. It has addressed many of their diverse needs and has given them a great start in leading confident and physically active lives.

Sandie Palamountain
Program Coordinator
Forbes Primary School
Ph 8293 4343

As Forbes Primary school has a swimming pool we have also used water exercise and games in the warmer months to increase strength and balance.

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Ridgehaven School’s ‘Jumping Beans’ Gross Motor Coordination Program

Ridgehaven School's ‘Jumping Beans’ is based on a developmental program, originally devised by Joan Crawford (Special Education Support Services) and Helen Short (Teacher and Student Support Centre), aimed at Junior Primary children aged five and six years. A modified version of the Gross Motor Activities – Stage One – Coordination Program is conducted by a School Services Officer. The program can be used in conjunction with the Fine Motor Activities – Stage One – Coordination Program.

Description Of The Program
The Program is described as “A card system of activities for poorly coordinated children – age 5 and 6” (Physical Education Branch Publication – Education Department of S.A., 1981). It consists of 189 cards, with each card outlining a gross motor coordination activity that can be set up at a ‘station’. The activities on the cards gradually increase in skill level and become more complex, to provide the children with new challenges and to reinforce the skills that they are developing. Each half hour session has three stations set up for the children to practice. Based on three sessions per week, the aim is for the children to practice at nine different stations a week, involving activities on nine different cards. At Ridgehaven School, as the program is conducted solely by a School Services Officer and the number of children on the program is low, modifications were made to the set up and implementation. Two half hour sessions are conducted per week and the number of stations varies, as do the activities, depending on the needs of the children. The average number of children on the program at any given time is 4, but it has reached 6 at times, due to need.

Aims of The Program
- To develop gross motor skills and coordinated body movements.
- To encourage the child to gain confidence in his/her ability to perform physical activities.
- To assist in the development of a desirable self image.
- To encourage each child to practise and, therefore, improve the quality, speed and accuracy of motor skills.
- To encourage the child to communicate effectively and work with others.
- To develop skills and confidence needed in the playground.
- To improve listening and concentration skills necessary for following instructions in the classroom.

Assessment
The inclusion of children in the program is determined by the results obtained from the administration of the South Australian Motor Coordination Test For 5 Year Olds (SAM). It is advised that children must be at school for at least 3 weeks before the SAM Test is conducted. At Ridgehaven School testing usually takes place towards the end of the child’s first term at school to allow the child to settle in. The aim is to identify children with gross motor coordination problems and not problems with their ability to follow instructions, so demonstration of each task is recommended, in case they have trouble interpreting verbal clues alone.

Test Items
There are 5 test items – Hopping; Standing on 1 Leg; Balance Walk; Bounce and Catch a Ball; Jumping. The results are recorded and analysed. A poorly coordinated 5 year old child is one who fails 2 or more of the test items. This child would be included in the Gross Motor Coordination Program.

Inclusion in the program
When a child has been identified as poorly coordinated and, therefore, recommended for inclusion in the program, the teacher is notified and his/her needs are discussed. A letter is then sent home to the parent/caregiver outlining the performance in the test and the areas of improvement that will be focused on. The length of time spent on the program varies from child to child, with some attending for a short time and others benefiting from a longer stay.

Close observations are made of each child’s performance during each session. Records/notes are kept to determine whether progress has been made, which activities to focus on more closely and therefore practise more, and when new activities should be introduced. When sufficient progress has been made and the child appears to have mastered the activities, he/she is retested using either the SAM Test for 5 year olds or the SAM Interim Test for 6 year olds. This depends, of course, on the age of the child or the length of time spent on the program. The results are recorded. If the child is successful, a note is sent home informing the parents/caregivers of the child's exit from the program. A certificate is awarded and the child is monitored in the classroom. If the child fails 2 or more of the test items, he/she continues with the program until such time that a satisfactory result is achieved.

The SAM Interim Test for 6 year olds involves the same test items with increases in the times and measurements.

True enjoyment comes from activity of the mind and exercise of the body; the two are united.

Alexander von Humboldt
Equipment

The following list of equipment is used in the Stage 1 Gross Motor Coordination Program:

- mats
- long ropes (1)
- short ropes (6)
- hoops (12)
- road marker (4)
- wooden rods 60cm (2)
- balance beam 2.5m
- inner tube tractor tire
- crayons
- space hoppers
- stable box for jumping
- cardboard cylinders
- ice cream lids (20)
- stilts
- pantyhose bats
- balls suspended in hose
- soft balls
- beanbags (18)
- wooden ladder
- balls 15cm (1 per child)
- large sheets of paper
- balloons
- bowling pins
- tambourine
- scooter board
- balls of different sizes
- exercise balls
- mini soccer goals
- mini basketball hoop
- mini golf clubs and balls
- number mats
- large foam mat
- large foam shapes
- crawling tunnel
- large bean bag
- skipping ropes
- spoons & ping pong balls
- quoits
- soft Frisbees
- grip balls and pads
- 1 legged stool
- trampoline
- rocker board
- instruction cards
- action die

We also make use of

- mats
- long ropes (1)
- short ropes (6)
- hoops (12)
- road marker (4)
- wooden rods 60cm (2)
- balance beam 2.5m
- inner tube tractor tire
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- spoons & ping pong balls
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- soft Frisbees
- grip balls and pads
- 1 legged stool
- trampoline
- rocker board
- instruction cards
- action die

The equipment available is plentiful and varied and its use is limited only by the imagination. The students’ needs would determine what is used and how often.

The Gross Motor Activities - Stage One – Coordination Program is well established at Ridgehaven School. The children involved become more aware of the different movements that their bodies can perform and their confidence grows considerably as they move through the program. They always enjoy taking part, particularly when a number of activities are incorporated into an obstacle course.

It is very satisfying for the educators and parents involved to see the progress made by the children. The children themselves are certainly very proud when, on completion of the program, they are presented with certificates at the school assembly.

References:

Gill Garritty (Dip.T)
School Services Officer, Ridgehaven School
Ph 82645277

An example of an activity card included in the Gross Motor Activities – Stage One – Coordination Program

(76) Lesson 2 Station 1 Week 9
Equipment : 1 mat per child, 1 bean bag per child
Activity : (a) Place beanbag in hands – position stretched body with beanbag and hands above head at one end of mat, ankles together. Roll from end to end.
(b) Place beanbag between ankles, body stretched. Roll from end to end on mat.
(c) Place body in stretch shape under a mat, roll along keeping the mat on top of body.

2011 Special Education Expo
Making a Difference

The 2011 event will be held from Monday 11th to Thursday 14th July.

Pre-Expo workshops traditionally held on the Saturday will now be offered on the Monday.

Program and workshop registration is available on the SERU website
What does inclusive mean
Being inclusive is as much a way of thinking as an actual process. It means providing all students, regardless of their physical ability, the opportunity to participate in every aspect of school life, thus enabling the student with a disability to benefit from the same educational opportunities as the student without a disability.

Students with a disability are often viewed as ‘different’ in terms of their requirements, aspirations, abilities and needs. There are however as many similarities as differences between students with or without a disability. Judgments should not be made about a student's aspirations based solely on one aspect of their character, especially their disability.

All students do not have to work towards the same educational goals or necessarily receive the same education. It means providing all students, regardless of their physical abilities, have the right to take risks and make mistakes, the need for independence and self-determination and the right to make choices. All students have different physical abilities and Physical Educators need to be able to modify programs to meet the needs of their students.

Benefits of an inclusive physical education program
There are a number of benefits in an inclusive program for the student with a disability, for the student without a disability and for the educator.

- It gives students with a disability the opportunity to develop their social skills in an environment which will benefit them in their future life in the community.
- It gives students without a disability the opportunity to appreciate individual differences and develop positive attitudes to those differences.
- It gives educators the opportunity to understand the needs and abilities of students with a disability and develop appropriate expectations of those students.
- All students will benefit from a well planned Physical Education program which addresses motor skill development, fitness and social skills, and leads to an increased knowledge of an active lifestyle.
- It provides all students and educators the opportunity to develop a broad perspective on life.

Disability Awareness
When teachers are initially given the challenge and opportunity of planning Physical Education lessons to include a student with a disability, feelings of uncertainty are to be expected. This may be due to a lack of information and experience that will change as the educator becomes more familiar with the student.

- Establish your own knowledge of the student with a physical disability and the physical implications of their disability.
- Discuss the nature of the disability with the students in the class. Be sensitive to any open discussion about disability in the presence of the student with a disability as they may feel discomfort at being singled out. Emphasise the following:
  - The physical capabilities if the student.
  - The importance of acceptance of students with differences and varying abilities.
  - The rights of the student with the physical disability for inclusion/participation.
  - Encourage the class to create ideas for the inclusion of the student with a physical disability in the P.E. Program.

Planning
When planning, program to cater for a range of alternatives, from full class participation to small group activities and individual activities. Using stations is a good way of challenging students while allowing each individual to work at their own level (modified equipment can easily be included for the student with a physical disability).

There may be some activities that the student with a physical disability cannot realistically participate in, depending on the level of their physical disability and also considering the safety of all students. For example, a student in a wheelchair participating in a game of basketball with students without a disability could result in students being injured by running into or falling over the student in the wheelchair. In this situation it is quite reasonable and educational for the student with a disability to do a skills test, recording their results and improvement, or parallel activities with modified equipment can be included. The other students in the class can be rotated into the skills test as well so the student with a disability is not working alone and without the social experience.

The social experience in Physical Education lessons is a very valuable experience for all students. If a student with a severe and multiple disability in a wheelchair, cannot realistically participate in an activity, for example a relay game, it is more valuable for the student to be pushed in their wheelchair by a staff member and experience the social aspect of the activity rather than sit and observe.

Age appropriateness
As far as possible the age of the student should be a guideline when planning activities, developing expectations and providing interactions in Physical Education. Skill levels need to be considered to ensure the student’s goals are realistic and achievable regardless of age.
Everyday Skills
Keep in mind the value of developing skills important for everyday life. For example, the student without a disability will participate in activities involving running, walking, jumping, throwing, catching etc. on different surfaces and weather conditions. It is equally important for a student with a disability, for example in a wheelchair, to experience pushing their wheelchair at different speeds, on different surfaces, in different weather conditions, and retrieving and placing items of different sizes, shapes and textures to different levels from their wheelchair. These physical skills simulate skills the student will require to live in the community.

Modifications
The following modifications can be used to enable the student with a physical disability to access the program:
- Changing the rules of the game.
- Decreasing the size of the playing area.
- Changing the length of playing time.
- Changing the number of participants.
- Modified equipment:
  - *Lighter, softer, larger ball*
    Often big, soft and slow balls and balloons assist eye-hand/foot coordination activities by decreasing the speed of the travelling ball, allowing the student more time to prepare to catch, hit and kick and also reducing the fear element that can occur with a hard, fast travelling ball.

  - *Shorter, lighter striking implement*
    Allows greater control for less able bodied students and students with coordination difficulties.

  - *Larger striking implement, larger goal or target area*
    Reduces number of misses and increases opportunity for success.

  - *Bean bags substituted for balls*
    These are not as elusive as balls and may be easier to throw and catch for students with a disability. They will not roll away from student therefore cutting down the time wasted in retrieving and allowing more time for practicing the skills.

  - *Partially deflated balls for dribbling and kicking activities*
    This slows movement of the ball and allows more time to prepare and execute with skill.

The following pictures and descriptions are examples of skills practices from the Modified Games & Skills Practices for Students with Physical Disabilities booklet produced by Rob McKinnon. This booklet can be purchased from Adelaide West Special Education Centre.

Throwing
For the student in a wheelchair or sitting on a chair, create opportunities to get maximum practice and reduce time spent having to retrieve the ball.
- Use a bucket of balls on a chair for easier access.
- Tie a ball to the chair/wheelchair.
- Throw things that do not roll e.g. beanbag, foxtail.
- *Thread string through middle of a Frisbee and tie to chair/wheelchair.*

Catching
- Minimise time spent retrieving balls and use helpful catching devices.
- Use any of the activities already mentioned in the throwing section focusing on ball or objects that are softer and easier to grasp (i.e. bean bags, ball in stocking, fox tails, balloons, soft and spiked balls, Velcro balls and bats).

- Bouncing balls to student may be preferred to catching full on (as for above, this often reduces the fear of catching).

Striking (hitting)
- Suspend items
  - on a string
  - in a stocking in front of the ambulant or wheelchair student
  - on elastic.
- Hit these items with a variety of instruments depending on the physical capabilities of the student e.g.
  - racquet
  - beach bat
  - table tennis bat
  - stick can be tied/velcroed
  - hand to hand or foot

continued
Kicking
If a student is on elbow crutches the crutch can be used by the student to assist them in kicking the ball.

If a student is in a walking frame the frame can also be used to connect with the ball, as if it were the student's feet.

A successful inclusive Physical Education Program requires team work and a positive school environment where there is a willingness to accept and value the individual differences of all students.

Our role as educators is vital in ensuring that students with a physical disability are active participants and receive the physical and social benefits of a Physical Education Program.

Pay greater attention to the abilities possessed by the student as opposed to the disability.

Rob McKinnon
Adelaide West School
Ph 8248 9100

The Early Development Program (EDP) Seaton Central

The EDP is a Special Education and Physiotherapy based Early Intervention program. The EDP was established in 1990 in the School of Special Education, Flinders University. Since then, it has been in several community settings but has now been based within the Communities for Children at Seaton Central for a number of years. Funding is from the Ministerial Advisory Committee – Students with Disabilities.

Children aged from birth to school entry who have severe multiple disabilities or significant developmental delays are eligible to apply.

To access the program families may be self-referred or referred by other professionals or organisations.

Children do not need to have a diagnosis. There is an initial phone discussion between parent and Coordinator to consider the child’s eligibility for the EDP and for the parent to find out more about the Program. If the child’s needs appear to fit criteria and the parent is interested in finding out more, an appointment is made to visit EDP to confirm eligibility and for the parent/s to decide if the program is suited to their child.

Each child has an individual program determined according to their developmental needs and the parent’s priorities. Observational assessments, programming and activities all occur within a play-based environment. Students from Disability Studies at Flinders University and from the School of Physiotherapy at University of SA work one-to-one with the children under the supervision of the EDP’s, Special Education Teacher and Physiotherapist. Each 2-hour session is a combination of individual play with 1:1 support, a group song/activity time, sensory activity and a snack-time.

There are two sessions at the Communities for Children at Seaton Central each Friday morning during term time, with 4 children attending each session. Parents / caregivers attend with their child for the 2 hour session, giving opportunities for them to provide information about their child to the staff and to gain information and ideas to use at home. The fees are $80 per term (negotiable in cases of financial difficulty).

As The EDP is small program that only operates for a few hours each Friday, there can be a waiting list. In initial discussions with the parent, the Coordinator will, where applicable or possible, suggest other services that may also be of relevance to the family, particularly if there are no immediate vacancies.

Elizabeth Martin
Coordinator / Special Education Teacher
Ph 8235 9556

Health is the vital principle of bliss, and exercise of health.

James Thomson

Exercise is the chief source of improvement in our faculties.

Hugh Blair
What Is Junior Club Slick?

The Junior Club Slick initiative is a 50’s and 60’s rock’n’roll dance/social skills program for participants aged 5 to 15 years of age with an intellectual disability. Anticipated benefits to participants in the project include the enhancement of social skills, health benefits of being involved in active recreation and the development of sequencing and coordination skills.

About Club Slick

Club Slick 50’s and 60’s Rock ‘n’ Roll Club gives all people with an intellectual disability aged 10-60, throughout the metropolitan and outlying regional areas, the opportunity to access and participate in the Club once a month in a safe and appropriately supervised environment (approximately 150 patrons attend the Club monthly). Club members also have the opportunity to take part in the Demonstration teams and the Down Syndrome Society’s annual Rock ‘n’ Roll Show. This target group includes people with intellectual disability from all population groups, including numerous residents from Minda Inc., Strathmont Centre and community group homes who often have limited social opportunities due to marginalisation, and limited recreation services that accommodate their specific special needs.

Club Slick is unique throughout South Australia, Nationwide and Internationally. Whilst young people can access Discos which play a role in the provision of leisure and recreation opportunities for this target group, Club Slick goes beyond these parameters by:

- using the performing arts and rock ‘n’ roll to promote active leisure and recreation participation
- people with intellectual disability being key committee members who are expected to actively promote Club Slick through the demonstration team and annual rock ‘n’ roll production

- encouraging self determination in learning increasingly complex dance routines and being able to showcase their talent by participating in the Society’s annual rock ‘n’ roll production and
- providing the opportunity for people with Down syndrome and intellectual disability to be the leaders and role models for others with similar disabilities.

Aim of the Junior Club Slick Initiative

To provide a Junior Club Slick based on the Club Slick model, once a month for 5-15 year olds attending private and public special schools and all other interested individuals.

Objectives

To develop:

- dance skills
- self help, social, and communication skills
- friendships
- a positive attitude to their disability
- self esteem confidence and independence
- appropriate social- sexual behaviour
- self regulation in the consumption of food and drinks
- and most of all to have fun!!

The Program

The program is divided up into four sections – Structured Dance, Free Jiving, Role Play and Raffles and Birthdays.

Enquiries

Down Syndrome Society
ph 8369 1122
email info@downssa.asn.au

Have a fun time Jiving!
The South Australian Sport and Recreation Association for People with Integration Difficulties Incorporated (SASRAPID) is an organisation established in 1982, which enables participation of people with an integration difficulty* into valued community sport and recreation activities.

* Intellectual disability and other disabilities, which may affect the integration of a person into regular community activities.

SASRAPID promotes the philosophy of integration, which enables participants to access the regular opportunities of the general community. These opportunities range from “having a go” at grassroots level to competing in elite competitions.

The following sport and recreation programs/projects are designed for people with an integration difficulty focusing on the individual’s choice and ability.

- **CANOEING**
- **CYCLING**
- **FOOTBALL**
- **INDOOR CRICKET**
- **INDOOR SOCCER**
- **LAWN BOWLS**
- **NETBALL**
- **SLEDGE HOCKEY**
- **RAPID SWIM**
- **AQUATIC THERAPY FOR CHILDREN WITH AUTISM**
- **BARRACUDAS SWIM SQUAD**
- **JUNIOR SPORTS PROJECT**

*S Please note all of the above programs/projects have entry criteria. For more details, please call the SASRAPID office on 8410 6999.*

SASRAPID is also able to assist individuals to access sport, recreation, leisure options in your local area... Athletics, Basketball, Gymnastics, Horse Riding, Judo, Personal Training, Table Tennis, Tennis, Ten Pin Bowling PLUS MANY MANY MORE!

**SCHOOL VISITS**

SASRAPID can visit your school (including regional and remote areas) and offer information, deliver the Sports Ability Kit including Traditional Indigenous games and provide options for athletes with an intellectual disability who want to compete at an elite level.

The benefits of being involved with sport and recreational activities include:

- improved levels of health & fitness
- enhanced self esteem & self confidence
- development of self reliance
- sense of belonging
- acceptance by peers
- the opportunity to achieve personal bests

**Enquiries**

SASRAPID
Ph 84106999

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**Sport. Life. Inclusion.**

**Family Morning**

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<th>Guest Speakers</th>
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<tr>
<td>Scott Shepherd</td>
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<td>&amp; Greg Healy</td>
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**Term 3**

Friday 26 August 2011
9:00am - 12.00pm

For more information please refer to the SERU website - [http://web.seru.sa.edu.au](http://web.seru.sa.edu.au) or contact Deb McGuiggan
Ph. 82352871
Email deb.mcguiggan@seru.sa.edu.au
Many of us have seen the amazing potential for the iPad (and the iPod touch) in Special Education and Augmentative and Alternative Communication (AAC). It is a very welcome addition to our toolkit of options although we must always keep in mind that it is only one of the tools we can use with our students. That said – iPads offer us thousands of Apps to use across all key learning areas, incredible interactivity and that amazing cool factor. Students are motivated to use them – and we are motivated to teach with them. More recently, the advent of the iPad2 with video mirroring (and its potential to work as a mini Interactive Whiteboard) has made this platform even more exciting for those of us working in education.

Unfortunately, some of the students that we work with have difficulty accessing the iPad and its Apps. While the iPad has great features built in for people with visual impairment, options for people with physical disabilities are limited. At other times, we limit our students’ access to iPads because of concerns about fragility or other issues. Hopefully this article will explain some of the range of options out there to help address these, and give you a starting point for looking at others.

Not long after the release of the iPad we began to see 3rd party developers starting to provide some of the touchscreen adjustments that our students need. Apps like Proloquo2Go (www.proloquo2go.com) began including some settings to assist with physical access. Options within Apps include disabling scrolling or ignoring accidental double taps. Unfortunately, for those students who need this, these settings don’t exist outside of the specific apps that have implemented them – but please be aware that these options do exist in many special education and AAC apps and make use of them where appropriate.

Currently, the majority of Apps with switch access are AAC Apps – for a full list of the AAC Apps that I am aware of and their access options (as well as which switch interface they work with) go to http://www.spectronicsinc.com/article/iphoneipad-apps-for-aac. There are only a small number of non-AAC Apps with switch access. Developers tell me that this is because they need to re-write the App to incorporate the code needed for the switch access – so until this is easier (or developers include it from the ground up) we will remain with a relatively small number of Apps with this option.

Other access options are also starting to spring up around the iPad space, as well as switch options. For example, there is a growing range of Styluses available. My favourite styluses at this point are only available on Etsy (www.etsy.com) from a shop called “ShapeDad”. They offer a T-bar stylus for students who are unable to grip a standard pencil shape, a mouthstick stylus and other options. They are also the most responsive and reliable styluses that I have used.

It's also good to know that there are a range of keyboard options for the iPad. I have actually had amazing success with some emergent writers with the onscreen iPad keyboard – the immediacy of pressing a letter and then seeing it appear on the same screen has been a real breakthrough in text production for some students.
However, we all know that some students need larger keys, or benefit from a keyboard where the keys actually move. For these students there are a range of external keyboard options – including the Apple Bluetooth keyboard, cases with inbuilt keyboards such as the Bluetooth Keyboard Case from ThinkGeek (www.thinkgeek.com). There is also the Apple iPad keyboard dock (www.apple.com/au) which allows you to charge your iPad while typing – but I’m not a great fan of this myself as I prefer to use my iPad in landscape mode in both the Mail App and In Pages which is where I do a lot of my typing. It is very important to try Apps in both landscape and portrait mode as different options can be made available – which can make the app much more (or less) functional for some students.

In addition to the keyboard options above, the iPad Camera Connection Kit (www.apple.com/au) also offers some great possibilities – strange but true! This adapter provides a USB port to plug a camera into – but which also works with many USB keyboards. This means that if a student needs a high contrast keyboard, like the VisionBoard 2, that they can use this to enter text into their iPad as well.

Yooralla Glenroy (www.yooralla.com.au) and Lasered Pics (www.laseredpic.biz) are now both making Perspex keyguards for the iPad. Lasered Pics also makes coloured acrylic options which can be very helpful for students with a visual impairment. Unfortunately, these keyguards can be limited in their use as many Apps change their visual appearance in different sections. For example, many AAC Apps have a grid arrangement with symbols, but also offer a pop up keyboard for typing. Apps designed like this are hard to use with a keyguard without making it easy to take on and off – which then may reduce the usability of the keyguard itself for some.

And finally, there are a lot more options appearing within the mainstream market which are extremely useful for our students. OtterBox (www.otterbox.com) make a very heavy duty case, called the Defender, which has saved many an iPad from a serious injury when dropped – and there are other impact resistant cases coming onto the market now too. Zagg (www.zagg.com.au) make a full body clear protector called InvisibleSHIELD that is a really great option not only for protecting the device from scratches, but also for students who have poor saliva control. Tunewear (www.tunewear.com) make a Waterwear case designed for sailors who want to take their iPad out and not worry about it taking a swim – this is a great option for an iPad on a wheelchair tray and providing protection from the elements. And Paperclip Robot (www.bubcap.com) make an awesome home button cover called the BubCap, designed to make the home button much more difficult to press. This is great for some students who try to leave an App as soon as it is open – but it also really reduces the click factor of the home button, which is a great break for some students with sensory needs as it allows them stop clicking the home button and start using the touchscreen. And iMainGo (www.imaingo.com), who make an amazing speaker case options for the iPod touch, are working on an iPad version. I am really looking forward to seeing that one out!

And last, but definitely not least, I want to mention the iAdapter. This is a specially designed case for the iPad from Amdi. It offers a heavy duty protective case, a handle, an inbuilt stand, amplification and a sliding home button cover. It is perfect for people using AAC Apps as it is nice and loud!

I hope that this list has been of use to you for at least one student – and would love to hear from people about their favourite accessibility accessories on janef@spectronics.com.au

The following are Australian suppliers for some of the items above:
RJ Cooper/Therapy Box switch interface is available from Zyteq www.zyteq.com.au
Blue2 switch interface and the iMainGo speaker cases are available from Spectronics www.spectronics.com.au
Apple iPad Keyboard Dock and iPad Camera Connection Kit are available from Apple online, Apple stores and Apple resellers
OtterBox defender cases are available from a number of mainstream stores, such as Harvey Norman and Dick Smith or from Expansys www.expansys.com.au
Zagg InvisibleSHIELD is available from www.zagg.com.au
iAdapter is available from Technability www.technability.com.au

Jane Farrell
Speech Pathologist, Spectronics
Ph 07 3808 6108
janef@spectronics.com.au
Gross Motor Activities At Home

**BALANCE ACTIVITIES**

- Encourage your child to ride a bike, scooter, skate board, roller skates according to your child's ability.
- Use stilts. Stepping Stones-Stilts (84041901)
- Walk along chalk line, string line.
- Create narrow paths above the ground made from discarded timber, bricks etc. Vary the height and slope and the width of the path. Put obstacles on the path to step over. Tactile Path (84041201)
- Jump on mattresses, large tractor tubes, or trampoline. Junior Jumper (84045701 new)
- Lie, sit or bounce on large balls. Sensory Therapy Ball (84036101), Specialised Physio Ball (84017801), Physio Pack with an activity book (84036701), Hopper Ball (84036401), Sit "n" Gym ball (84037501), Hop! (84032901)
- Lie, sit or bounce on large balls. Sensory Therapy Ball (84036101), Specialised Physio Ball (84017801), Physio Pack with an activity book (84036701), Hopper Ball (84036401), Sit "n" Gym ball (84037501), Hop! (84032901)
- Climb steps/stairs. Motor Skills Basic Set (84041301), Specialised Slippery Dip (84017501), Specialised Soft Steps (84018201)
- Challenge your child to jump and hop into and around obstacles such as tyres, hoops, rope in a circle.
- Encourage your child to balance first on one leg, then on the other for as long as possible. Play hopscotch.

Other resources at SERU for developing balance - Rocking Seesaw (84042101), Hand Held Rotation Board (84042201), Tai Chi Balance Board (84042301), Balance Board (84009701), Specialised Double Rocker (84012201), Teeter totter (84018901), Specialised Slippery Dip (84017501), Maze Balancing Board (84042001), Specialized Gigantos Circular Saucer (84017701).

**CRAWLING (develops coordination- laterality, synchronises right and left body sides)**

- Treasure hunt- crawl to find hidden objects.
- Crawl through an obstacle course eg through a tyre, under a table/rug, around chairs, over a pile of pillows. Peanut Roll (84034801), Specialised Triangular Wedge (84014101), Specialised Log (84035001)
- "Follow the line"- crawl along a rope path. Rung Way set (84039001)
- Crawl through a tunnel made from boxes. Tunnel Crawling (84031301), Barrel of Fun (84036901)
**EYE/HAND AND EYE/FOOT COORDINATION EXERCISES**

- Use a scooter board. *Various scooter boards (84039801, 84034302, 84039801, 84039802)*
- Use ride on toys. *Little Roadster (84040501), Scooter Car (84045401), Wheely Bug Ride On Mouse (84036304), Ride On Bee (84036302)*

- Climb a jungle gym or climbing frame at the playground- this develops upper body strength that is important for many later school tasks.
- Catch and bounce balls of various sizes. *Soft ball with a bell (80004801), Spider Ball (80026901)*
- Tap balloons in the air.
- Play with hoops, Frisbees, “bat and balls”. *Fling O Majig (84039601), Scoop Ball Set (84039501), Flip and Catch Set (84043501)*
- Skip with a rope.
- Ring toss. *Star Quoit Set (83162801)*
- Darts game. *Safety Dart Set (84039701)*
- Kick balls of different sizes using one foot and then the other.
- Kick balls or throw bean bags or balls at a target. *Sports Ability Boccia (84040101), Sports Ability Goalball (84040201), Sports Ability Sitting Volleyball (84040401), Two Sided Bean Bag Toss (84045501), Bean Bag activities (84043401)*
- Walk with hands and feet on and between the rungs of a ladder lying on the ground.
- Use a see saw. *Teeter Totter (84018901)*
- Follow footstep patterns cut from cardboard.
- Invite your child to be your shadow and mimic all your actions as your walk about and perform simple actions.
- Join with others in parachute games. *Parachute with Handles (84035102), Specialized Parachute (80012101), Playtime Parachute Fun (84043301)*

Other Resources from SERU – *Pedal Peter (84032101).*

**BODY AND SPACE AWARENESS ACTIVITIES**

- Play Simple Simon- put your hands on your shoulders, touch your knees with your elbows.
- Make an obstacle course that involves going under, over, between, through, around objects.
- Challenge your child to move forwards, backward without knocking into objects.
- Crawling through play tunnels.
- Swinging, climbing and exploring playground equipment.
  - Jumping and/or hopping into hoops, old tyres.
  - Jump up to touch suspended objects.
  - Twisting and turning. *Twist N Turn (84015001)*
RESOURCES RELATED TO THE TOPIC

Watch Me, I Can Do It!, Cocks, N. 1992. 43.0077.01
A book written for parents of primary school children who find it difficult to master motor skills such as running, skipping, using scissors. The book aims to guide parents by: providing an overview of motor development; showing how motor difficulties manifest; providing many ideas and suggestions that can be tried at home.

Play & Learn: A Motor Based Preschool Curriculum for Children of All Abilities, Sullivan Coleman, M & Krueger, L. 2002. 43.0083.01
This book contains a twelve month curriculum for early years learners, that integrates motor skill development with communication, socialisation and cognitive skill development.

Smart Moves: Motor Skills Development Programme, 2006. 43.0088.01
This programme, devised by a children’s occupational therapist, aims to assist educators to evaluate learners in the early years with motor coordination difficulties and to design programmes that develop motor skills.

Perceptual Motor Lesson Plans Level 1, Capon, J. 2005. 43.0090.01
This book contains basic and practical lesson plans for learners in preschool and the first year of junior primary school. The 25 weeks of activity stations, including detailed illustrations, are sequenced according to difficulty and include an evaluation scale, objectives, program set up information and equipment construction diagrams. See also Perceptual Motor Lesson Plans Level 2.

Core Concepts in Action, Frick, A & Kawar, M. 2004. 43.0091.01
This book contains movement activities, designed for children of all ages, that develop strength, endurance and rhythm. Each double page spread contains a different activity and details the relevant music to use from the accompanying CD.

Overcoming Obstacles to Physical Activity, Alexander, G. 2008. 66.1413.01
This book is one title in the Health and Understanding Series, which promotes awareness of health in our (Australian) society. This title shows how some children, with a range of disabilities, were helped in overcoming their obstacles by attending ‘Camp Can Do’.

Maze balance Board. 84.0420.01
This board can be gripped in both hands and manipulated so that the small balls move around the maze. Alternatively the child can balance on the board and rotate the balls through the maze by moving their body and feet.

Motor Skills & Movement Station Lesson Plans for Young Children, Landy, M. & Burridge, K. 2000. 66.0796.01
This book is one of three books in the Complete Motor Skills Activity Program. It is a practical series designed to help early childhood teachers, PE specialists, special educators and therapists, develop and improve motor skills abilities in all children over five years who have coordination and movement difficulties. Each book in the series contains hundreds of developmentally age appropriate activities to build young children’s competence and confidence in specific skills. See also: Ready to Use Fundamental Motor Skills and Movement Activities for Young Children, 66.0795.01


Physical Education Games for 6—8 Year Olds, Book 1, Larking, P & Abbots, T. 2000. 66.0778.01
This book of blackline masters includes ideas and lesson plans for physical education games for students ages 6-8. The games and activities range from shorter activities to full sports afternoons and cater for a specific skill in the age range. See also: Physical Education Games for 9-12 Year Olds.

Basic Skill Development Gross Motor Focus Play Pack. 66.1397.01
This pack of 15 skill based game cards, focusing on gross motor development skills, can be easily adjusted for a range of ages (3-12) and abilities. It is intended to also encourage social interactions. Easy to follow directions, skills and tips are found on the back of each card. See also Skill Based for Fun Activities for All, 66.1398.01

Keysteps, Short, H & Crawford, J. 1991. 09.0155.02
A structured program of activities suitable for students with Downs Syndrome in the areas of fine motor, gross motor, self care and music and dance. The activities are on a series of cards with carefully structured sessions.

Rocking Seesaw. 84.0421.01
This hard plastic step-on board provides a skill building challenge to children as they have to stay balanced in the middle by rocking back and forth. This board is suitable for children aged 6-8 and a helmet is recommended.

Move About Activity Cards, Jereb, D & Koehler, M. 66.1423.01
This set of activity cards is designed to help children develop sensory motor skills. Many of the activities require no equipment while others need equipment such as therapy balls or gym mats. A snap ring that the cards can be clipped onto is also included.
Tactile Path. 84.0412.01
These eight large, colourful hard plastic, interlocking pieces of board, suitable for ages two and up, combine to make a curved path. The combination can be changed to make a variety of different walking paths. The tactile dots on each board provide feet stimulation and balance control.

Sports Ability Sitting Volleyball. 84.0404.01
The sports ability kit is an inclusive activities program that adopts a social/environmental approach to inclusion. The pack contains instructions and equipment for volleyball. It includes a variety of different volleyball games, including sitting volleyball. See also Sports Ability Kit Boccia, Table Cricket and Goal Ball.

Wheely Bug Ride On Mouse. 84.0363.04
This padded ride-on wheely bug mouse is suitable for children three and over with a maximum recommended weight of 25Kg. See also Wheely Bug Ride On Bee, 84.0363.02

Scooter Board Small With Handles. 84.0398.02
Children can sit on their knees and roll on the floor with this scooter board or stand upright and practice their balance skills.

Stepping Stones Tactile Perception Series. 84.0419.01
This pack contains three sets of hard plastic, colourful stilts which, when used with bare feet, provide sensory/tactile feedback.

Hand Held Rotation Board. 84.0422.01
To operate, the child sits on the board and grips the handles on either side with both hands, and moves so that the board wobbles and rotates.

Star Quoits Set. 83.1628.01
This colour coded quoits set is suitable for pre school and early years students, to practice eye hand coordination and gross motor skills.

Specialised Toddler Swing. 84.0190.01
This toddler swing (400 x 200 x 430mm) is made of plastic with a high back seat and can be hung from a beam or hook; the ropes are attached. This resource could be used to encourage movement awareness and balance in young children as part of a sensory motor integration program.

Developmental Coordination Disorder, Cermak, A. & Larkin, D. 2002. 18.0154.01
This book, providing a multidisciplinary, multicultural view of developmental coordination disorder, presents current advances in therapy and practice. Chapters are authored by specialists from fields such as: medicine, occupational therapy, physical therapy, pediatric neurology, human movement and psychology. Description and assessment are covered, along with underlying mechanisms, functional implication and intervention strategies.

Gross Motor Activities for Pre-Schoolers. Buhite, L. & Mayer, C. 43.0066.01
The activities are described in this book develop confidence in space relationships, develop balance, posture, coordination, arm and leg strength and timing skills. Each activity is followed by a list of suggestions if the child shows difficulty performing the task. The activities are developed for preschool to lower primary school aged children.

Beach Wheelchair. 88.0579.01
The beach wheelchair is designed to be used on soft terrain including shallow water. It is adult size but can be used with younger students who have a good sitting balance. The seat height is 48cm and there is a lap belt. The chair is suitable for short term activities and is available on short term loan.

Motor Skills Basic Set. 84.0413.01
This hard plastic, lightweight, colourful motor skills set provides a range of opportunities for a close physical interaction with the environment and promotes growth and learning through play. The components can be assembled in a variety of forms designed to provide a wide range of gross motor experiences.

Tai Chi Balance Board. 84.0423.01
This hard plastic colourful balance board is suitable for ages three and up with a maximum weight capacity of 60Kg. While balanced on the base, with the child’s feet on either side, a ball can be moved through the maze on the base by the child shifting their weight from side to side. The base pattern or inserts can also be manipulated using the hands to move the ball through the maze.

Rung Way (set of 4). 84.0390.01
This large colourful plastic collection of rungs can be used individually or combined to form a variety of ‘pathways’. They provide experiences in gross motor and sensory feedback. Children can: walk (with or without shoes), crawl, lay full length, and pull themselves along.

Scooter Car. 84.0454.01
This ride on scooter is suitable for children 2-7 with a maximum recommended weight of 23Kg.

Barrel Of Fun. 84.0369.01
This giant plastic barrel (81.5 x 58cm) can be used for sensory motor integration programs and gross motor activities involving rolling, balancing, weight bearing, crawling and riding.

How Does This Affect Me? Sadgove, J. 1999. 66.0971.01
This book is one in the Health and Fitness series and provides answers to questions about exercise and how it affects health. The book is illustrated by colour photographs and text presented in a magazine format. Topics include: Why do we need exercise? What is fitness?, How exercise can help you, Choosing an activity, Avoiding problems.

continued
**Teeter Totter.  84.0189.01**  
This bright red and yellow plastic seesaw measures 120 x 30 x 40cm and is designed for young children. It is lightweight thus easily lifted by an adult. It can be used both inside and outside.

**Essentially Fit! Book A. Green, S.  2004. 66.1206.01**  
This is the first book in a physical education series providing comprehensive ideas and direction for daily fitness activities. The series contains step by step plans for fitness lessons that also develop: small ball skills, large ball skills, oval ball skills, athletic skills and team skills.

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**JOURNAL ARTICLES RELATED TO THE TOPIC**

- **Issues surrounding children with developmental coordination disorder**  
  Sugden, David et al  
  International Journal of Disability, Development and Education  
  Vol 5 No 2, June 2008

- **Motor Coordination and Social - Emotional Behaviour in Preschool-Aged Children**  
  Piek, Jan P et al  
  International Journal of Disability, Development and Education  
  Vol 55 No 2, June 2008

- **Life Construction Ahead**  
  Bolick, Teresa  
  Autism Spectrum Quarterly  
  Spring 2008

- **Physical Activity in the Life of a Woman With Severe Cerebral Palsy - Showing Competence and Being Socially Connected**  
  Gaskin, Cadeyrn J et al  
  International Journal of Disability, Development and Education  
  Vol 56 No 3, September 2009

- **Water: The Ideal Early Learning Environment**  
  Grosse, Susan J  
  Exceptional Parent  
  Vol 38 Issue 2, February 2008

- **Pool Rules: A Survival Guide for Parents And Children**  
  Grosse, Susan J  
  Exceptional Parent  
  Vol 38 Issue 3, March 2008

- **Wet and Wonderful Waterbark Fun**  
  Grosse, Susan J  
  Exceptional Parent  
  Vol 38 Issue 4, April 2008

- **Outdoor Play - Does Avoiding the Risks Reduce the Benefits?**  
  Little, Helen; Wyver, Shirley  
  Australian Journal of Early Childhood  
  Vol 33 No 2, June 2008

- **Physical Education and Implications for Students with Asperger’s Syndrome**  
  Simpson, Cynthia G; Gaus, Mark D; Garcia Biggs, Mary Jo; Williams, James Jr.  
  Teaching Exceptional Children  
  Vol 42/6 Jul / Aug 2010, p48-56
Inclusive Technologies recently released the first in a series of Learning Journeys publications titled Switch Progression Road Map. It was written by their Special Projects Manager Ian Bean. Ian is a worldwide authority on assistive technology and children with additional needs and is best known for his work at Priory Woods School. This booklet draws together over ten years of best practice research and classroom observations from around the world into a comprehensive teaching and assessment document. It details every stage of switch skills acquisition from cause and effect to confident scanning. The document assists in planning meaningful and motivating routes to success for learners using switches to access communication, learning and leisure. The Switch Progression Road Map is packed with practical advice and tested teaching examples. It will help to assess a learner’s baseline, set achievable learning milestones and provide educators all the help needed to teach these important skills in a way which is both meaningful and motivating for students. At every stage along the way the booklet provides advice on which software and hardware works best and how to set them up to personalise the learning experience.

Additional titles in the series to be shortly released include:
- Learning Journeys: Touch Screens and Interactive Whiteboards
- Learning Journeys: First Steps to Communication
- Learning Journeys: The Beginner’s Guide to ICT and Special Needs

The following links provide additional resources and activities for switch users:
- [http://www.hivah.net/](http://www.hivah.net/)
- [http://www.shinylearning.co.uk/freegames/](http://www.shinylearning.co.uk/freegames/)
- [http://teachinglearnerswithmultipleneeds.blogspot.com/](http://teachinglearnerswithmultipleneeds.blogspot.com/)

This website provides a description of differentiating instruction for students with disabilities and a table with general adaptations / suggestions for a range of specific activities.

This website provides reasons for youths with disabilities to become involved in sports / recreation activities.

This webpage on the Be Active website seeks to promote participation by people with disabilities in regular physical activity.

The six webinars have a range of people from the sport and disability sector providing practical examples of how working together can result in getting people with disability involved in their local community through sport.

Eight information sheets on the topic of disability and sport are available from this webpage.

A fact sheet on developing gross motor skills for a child with autism, however the activities can be adapted for others.

The Texas Woman’s University’s Project INSPIRE provides details on modifications for a range of games and sports, with further links to Teacher to Teacher and Cooperative Play web pages.

A newspaper article describing physical education classes being adapted for students with disabilities.

The FREEDOM WHEELS customised bike program modifies standard push bikes to give a new kind of independence to children with disabilities, by allowing them to ride a bike for the first time.

Switch Progression Road Map
[http://www.inclusive.co.uk/publications](http://www.inclusive.co.uk/publications)

This website provides additional resources and activities for switch users:

- [http://www.pecentral.org/adapted/adaptedactivities.html](http://www.pecentral.org/adapted/adaptedactivities.html)
Nintendo Wii

As advertised in this edition of SERUpdate, SERU now has a Nintendo Wii available for loan. The Elizabeth Vale Special Class purchased a Wii with part of its SERU Technology for Inclusion Grant in 2009. The Special Class Teacher, Jacqui Forjan reports on the impact of its introduction.

It was initially intended to use it to assist with student motor skill development. However, many other benefits associated with the introduction of the Wii to our learning environment were quickly discovered. While the students are developing their motor skills; they are also being given the opportunity to practise the social skills we teach, in a real life, relevant situation. Turn taking, negotiation, perseverance, good sportsmanship, patience and fair play are all necessary life skills (in both work and play!).

Elizabeth Vale is a multicultural and diverse community. All children relate to technology, and as such, the Wii has supported breaking down barriers and assisting with social inclusion. It is wonderful to observe students patiently helping and encouraging others as they strive to master a sporting game or to perfect a yoga pose. As a Special Education class teacher, I am constantly searching for new and exciting ways to inspire the students with their learning. The Wii has been a positive inclusion to our learning environment with the students constantly asking to ‘play’! As we all know constructive play is at the core of effective learning. The Wii has certainly enriched the learning of our multicultural Special Education Class.

A 40 minute recorded presentation titled Using The Nintendo Wii with Student With Disabilities can be viewed at http://bit.ly/mMxKmV. The presenter is Jeff Souter, the Coordinator of the Learning Development Centre - ICTs - Students with Disabilities based in Woolloongabba, Brisbane.
**AppBits**

**QR Codes**

A QR Code is a type of barcode that is readable by dedicated QR barcode readers and camera telephones. The code consists of black modules arranged in a square pattern on a white background. The information encoded may be text, URL, or other data*. In essence, a QR barcode ‘pattern’ on a piece of paper can connect a student from the physical world to the digital one. The acronym for QR is Quick Response.

This mainstream application has wide implications for use as an assistive technology. **Greg O’Connor recently posted an informative blog entry on QR Code at [http://bit.ly/jlQ2XV](http://bit.ly/jlQ2XV). The blog entry lists some informative links as to how educators are using this barcode system to provide a more inclusive means of accessing digital information.**

**Greg is conducting a range of workshops around inclusive technologies at the 2011 Special Education Expo and the use of QR Codes in the classroom will be featured in some of his presentations.**

There are a number of ways in which a computer can be physically accessed more effectively by a student with additional needs. This can include an Intellikeys keyboard, trackball, graphire tablet or touch screen. There are now a number of apps which can be used on an iPad or iPod to remotely control a computer. These types of apps fall into two categories: apps which provide wireless control of the keyboard and mouse and apps which display the desktop of the wirelessly connected computer. All of these apps require the installation of free server software on the computer to enable the computer to establish communication with the iPad or iPod Touch.

**Wireless Control Apps**

**Hippo Remote**


Hippo Remote has a programmable keyboard, pre-set configurations for over 60 software applications including Internet Explorer and PowerPoint. A Lite version is available.

**Splashtop Touchpad**


This app has a keyboard mode and a touch pad mode for navigating the web.
To ensure our resource centre is meeting the needs of our clients and continues to reflect current initiatives and trends, SERU will be conducting a survey during Term 2. The survey will be distributed the following ways:

- Included with resources sent by courier to borrowers (please return by fax, mail or with resources)
- Available on the SERU website (web.seru.sa.edu.au)
- Request it by email (admin@seru.sa.edu.au)

Please assist us in gathering information to inform continuous improvement of our services.

Remote Desktop apps

There are a number of apps which provide virtual desktop access to a computer. These types of apps can display the desktop of any computer which shares a wireless network with the iOS device. The iPad or iPod can then be used to control all aspects of the computer (including operating its software).

Splashtop Remote Desktop
http://www.splashtop.com/remote

This app provides full control of the computer and all digital content is directed to the iPad. The audio of a multimedia file is also streamed across to the iPad. This now makes it possible to view Flash content on the iPad. In essence, this app provides the same functionality as a mobile touch screen and operates as the interactive whiteboard of the computer (whether the computer is attached to an interactive whiteboard or just a data projector). The attached screenshot shows how Clicker 5 was accessed on an iPad using Splashtop Remote Desktop.

Splashtop Whiteboard
http://www.splashtop.com/whiteboard

This app has similar features to Splashtop Remote Desktop but it also includes annotation features found in interactive whiteboard software. The app extends the use for current IWB users but it also allows teachers who do not have an IWB the opportunity to implement one with just a data projector.

Correction from last edition of SERU Update.

The app ZoomReader is only compatible with the iPhone 4. The camera resolution of the iPod Touch and the iPad is not sufficient to provide accurate OCR results.

REMEMBER

RESOURCE CENTRE SURVEY

To ensure our resource centre is meeting the needs of our clients and continues to reflect current initiatives and trends, SERU will be conducting a survey during Term 2. The survey will be distributed the following ways:

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- Available on the SERU website (web.seru.sa.edu.au)
- Request it by email (admin@seru.sa.edu.au)

Please assist us in gathering information to inform continuous improvement of our services.
There has been an explosion of apps released for the iPad in recent times. Many are having a profound impact on students with special needs. It has even resulted in the unforeseen establishment of a Special Education section on the iTunes Store!

This presentation will provide an update on the latest developments in mobile device use in special education. An extensive range of apps that support communication (including augmentative communication) and learning for students with disabilities and learning difficulties will be demonstrated.

Essential considerations for media management and the implications for school implementation and management of iPads will also be discussed.

Participants are required to register their attendance with John McCourty (john.mccourty@seru.sa.edu.au) via email and provide the following details:
- preferred session time
- number of people attending
- type of system in use, choosing from the following
  - Mobi PC / laptop unit
  - PVX PX / laptop unit
  - Polycom room unit
  - Tanberg room unit

For more information contact Jim Sprialis or John McCourty on 82352871
**NEW RESOURCES**

**Dyslexia: A Complete Guide for Parents, Reid, G. 2004. 18.0199.01**
This book provides information and advice for parents that includes what dyslexia is, how it can be identified, strategies to use at home, how to work with professionals and legislation and resources in different countries.

**Our Family is Starting School: A Handbook for Parents and Carers, Perry, B. & Dockett, S. 2006. 32.0081.01**
This is a practical resource for families that highlights the many things families can do to support their child’s transition to school. It resulted from the Starting School Research Project based at the University of Western Sydney.

**Working With Teachers, Tullemans, A. 2007. 32.0082.01**
This book is a guide to help parents work collaboratively with their child’s teacher. The author shares all the strategies that have worked for her over the years to build effective partnerships and successful programs for her child.

**Roll and Learn Beginning Math. 64.1515.01**
The two soft cubes have clear plastic pockets for the number and shape cards to be inserted, making games flexible and adaptable. Using the skill of matching, memory and labeling, the games provide practice in identifying shapes, colours and numbers, as well as even and odd numbers, simple addition and matching sets of objects to numbers. The instructions also suggest variations. Suitable for children aged 5-8 years old.

**Number Bean Bags. 64.1520.01**
The 20 machine washable flannel bean bags each has a number stitched on one side and a number written on the back. Odd and even numbers are stitched in different colours to help children learning to count from one to twenty. These can be used on a variety of ways to help children recognise numbers and learn to count.

This guide for parents and professionals who are toilet training children with autism, provides strategies that are also applicable for a range of children with special needs. Strategies described include using visuals, developing routines and giving appropriate cues and prompts.

**Time Match-Up Puzzles. 64.1518.01**
These puzzles provide practice in telling the time to the hour, half hour and minute. One piece of the puzzle has a picture of an analogue clock and the matching piece has a picture of a digital clock. Students are required to match the correct digital time to the analogue time showing in the pictures. The puzzle pieces are unique for each match up so the activity is self correcting. Suitable for children aged six and up.

**Numbers 0-10 Match Me Game. 64.1519.01**
This box contains games designed for children ages 3-6 years. It provides practice in counting and addition numbers 0-10 and developing matching and memory skills. The instruction sheet describes how to play the games, including lotto, addition lotto, memory challenge and number matching. The cards have clear and colourful photos of objects.

**A Quest for Social Skills for Students with Autism or Asperger’s. Cumpata, J. & Fell, S. 66.1453.01**
Quest (Questioning, Understanding and Exploring Social Skills and Pragmatic Language Together) is a school based social skills program combining written instructions with games, activities and students interaction.

**Listening Lotto: Learning to Read, 2007. 63.3302.01**
A bingo game for up to 12 players to reinforce sight words. The accompanying audio CD contains 50 different sight words arranged in random order. Each word is repeated twice and then used in a sentence.

**Active Alphabet, Smart Kids, 2007. 63.3288.01**
Active Alphabet is a big book with a collection of fun actions for learning the names and sounds of the letters in the alphabet. The multisensory approach used is an ideal way to engage all learners through singing, drama, exercise and play.
This pack is a collection of bingo type games that are intended to reinforce place value in numbers from hundredths to a million. Instructions are included. Lessons, teacher checklists, and high/low assistive technology solutions are included.

This book outlines the Four Block approach to teaching literacy in mainstream classrooms and special education facilities. The Four Blocks are self-selected reading, guided reading, writing and working with words. Lessons, teacher checklists, and high/low assistive technology solutions are included.

This book is a guide to promoting children's social and language development. It is designed to assist early year educators to promote the language learning of all learners.

After reading a sentence the student can use the word cards of the matching colour to substitute a word to change the meaning. The student must then read the sentence again to decide if it makes sense. They can continue substituting words to make new sentences and checking to see if they make sense.

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After reading the question card the children must decide if the answer is yes/no. The activity involves practice at reading, thinking about the meaning and deciding the answer. It can be played in pairs or groups and with up to 24 children in junior primary classes.

See also Expository Writing Years 6-9

This book of blackline masters is specifically designed as a resource for teachers to explicitly teach students how to write an exposition. All aspects relating to the genre are covered including language, the writing process and and structure, as well as research strategies and the use if ICT.

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This book is a guide for parents and caregivers of young children who may have been diagnosed on the autism spectrum or simply having difficulty interacting with others. It offers a simple approach to help children develop better social skills so they can engage in conversations and make friends more easily.
The theme for the next edition of SERUpdate is ‘Building Relationships.’

Contributors for this edition may like to consider the following guiding questions when formulating an article:

- What issues/challenges did you identify that lead to implementing a program to improve relationships between learners in your school?
- Describe the program / strategies / resources you developed or implemented for building relationships. What were the outcomes?
- Quote any research that guided you in your decision to carry out the program.

Would you like to contribute an article?
SERUpdate relies heavily 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.

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