Building on success

A window of opportunity

The primary years 3, 4 and 5

*Building on success* has been produced for all educators with a commitment to student learning in the years 3, 4 and 5.

The National Goals of Schooling in the 21st Century acknowledges that ‘schooling should develop fully the talents and capacities of all students’. In working towards this it is imperative that teachers fully understand how to provide a supportive and nurturing environment for students so that each student develops ‘a sense of self-worth, enthusiasm for learning and optimism for the future.’

*The Adelaide Declaration on National Goals for Schooling in the 21st Century*

*MCEETYA 1999*
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Building on Success

This paper begins to outline some of the identified characteristics of learners in years 3, 4 and 5 in light of new understandings and research. It aims to support the work in year 3, 4 and 5 classes by identifying some implications and challenges for current school practices as identified by the primary network teachers.

The teaching and learning of children from birth to year 12 is now being clearly articulated for the first time in education by a seamless curriculum, the South Australian Curriculum Standards and Accountability Framework (SACSA).

To support the progress of a child through the broad developmental bands (early years, primary years, middle years and senior years) we require a deeper understanding of the nature of the learner at each developmental stage. With this knowledge, quality programs that provide enriching and diverse experiences and support student learning can be delivered within schools and classrooms.

The SACSA Primary Years band focuses specifically on the learning for years 3, 4 and 5. This raises the question: What do we know about a child’s physical, intellectual and social development in the primary years 3, 4 and 5 and how does this inform our practice?

There is a widespread view there has been very little information available to specifically assist middle primary teachers since the 1986 Primary Education Review.

During 2000, a network of 70 year 3, 4 and 5 South Australian teachers was established to gain a better understanding of the characteristics of learners in these years. Network teachers were involved in professional development sessions based on available research about the developmental issues for 8 to 11 year-old children. Teachers undertook their own classroom/school research and trialed developments with their own teaching practice based on the issues raised by the research findings.

Studies of this age group through international and national research acknowledge that characteristics of this age group are historically socially and culturally constructed.

The characteristics explored through this paper have been grouped under three domains: physical development; cognitive development; and social and emotional development as explored in the Primary Education Review (1986). It is accepted that children develop at different rates in all three domains and that a three-year span of variation of development is considered normal. (Jensen 1998)
Physical Development

What are the main characteristics evident in the physical development of children between the ages of eight and 11 years?

The period of the human lifespan of eight and 11 years is typified by a slow and steady increase in height and weight, providing time for children to adjust to their bodies prior to puberty and to improve coordination and motor control.

At this age boys and girls are similar in height and weight with little difference between their growth patterns. However, the variation in physical size of eight to 11 year-old children may be significant. For example: nine year-olds may range from 16.5 to 61 kg, and 100 to 158 cm. (Olds, Dollman, Norton & Harten, 1999)

**The implications for the year 3, 4 and 5 physical education and sports programs include the need for modified games and equipment that allow all children to participate with success.**

For children of this age the body mass index (BMI) or weight-for-height index is often lower than at any other time. Low levels of body fat create a situation where body surface area to body mass ratio is very high. This has implications for rapid heat loss and for body temperature regulation. (Rowland, 1996)

**This means children of this age are vulnerable to significant heat loss especially during swimming lessons and outdoor activities in cold weather.**

Research shows that physical activity during preadolescence and youth stages of development results in increased bone density when measured during early and middle primary. This suggests an ideal time to bank calcium deposits for future bone requirements in life. (Kemper & Niemeyer, 1995)

**The primary years are a crucial time for the strong development of the bones. Regular fitness skills that incorporate a range of weight bearing activities (for example, walking, skipping, and aerobics) are required to build on bone density.**

For both boys and girls, puberty is occurring earlier. The age of girls beginning to menstruate has decreased at the rate of four months per decade (now between 10-14 years), while boys’ voices are breaking about 2.5 months earlier every decade. (Olds, Dollman, Norton & Harten, 1999)

**Children at this age require a specific understanding about how bodies grow, develop and differ from each other. Sensitivity to the use of change facilities and wearing of appropriate clothing is essential.**

Generally children in years 3, 4 and 5 are full of energy, but often possess low endurance levels and tire easily. With regular physical activity their endurance will improve as their lungs continue to develop until after puberty.

**Allowing children to ‘graze’ on fresh fruit and vegetables and drink plenty of water during the day will help to keep up their energy levels.**

Vision plays an important role in the process of motor development. The optic nerve takes about 10 years to reach adult levels. Therefore, the perceptual abilities of primary students to fix on objects, predict the flight path of a ball and make accurate judgements of size and shape still require refinements. (Gallahue & Ozmuns, 1998)

**Specific skills training opportunities will allow for the development of visual perceptions; for example, speed of travel, depth perception, distance judging. Modifying rules of play provides students with more time to react and to track the path of objects.**
The development of motor coordination and skilful movements of children in this age group is dependent upon the maturation of their visual and kinaesthetic sensory systems. This has implications for the integration of information from many different sensory systems. The period eight to 11 years is particularly important time for developing more precise skilled movements through practice. (Gallahue & Ozmuns, 1998)

Repeated physical tasks and practice of skill activities help this process to occur more effectively. This includes simplifying the mechanics of the movement to assist learning.

As adults this generation of eight to 11 year old children are likely to be three cm taller and three kg heavier than adults of today. The years between eight to 11 years are, however, the leanest years of body fat stores when compared to rest of life. (Dollman, Olds, Norton & Stuart, 1999)

‘The challenge for helping others enjoy a healthy and active life is to move the focus of instruction from physical fitness to physical activity... promoting and encouraging physical activity is an outcome that can be accomplished by all children regardless of ability or personal interests...’

(Pangrazi, 2000)

Cognitive Development

What are the main characteristics evident in the cognitive development of children between the ages of eight to 11 years?

As children enter middle primary their thought processes become more logical, consistent and deliberate... with an increased ability to remember and concentrate, a child’s ability to speak and express more complex ideas grows rapidly. Children move from being unable to distinguish their point of view from that of others to learning to keep in mind the opinions of other people from a wider variety of contexts.

(Bowler & Linke, 1996)

The field of brain research suggests strong links between enrichment and performance. In her research findings of 1964, Marion Diamond reported on the impact that enriched environments seemed to have on the functioning of the brain. She also suggested that the brain has high levels of plasticity, enabling it to adapt to its environment, including the ability to be re-stimulated through enrichment. (Diamond, 1988)

An enriched classroom program includes: activities that focus on sensory experiences; coherent and challenging activities that are aimed at the learner’s level of understanding or ability; clusters and patterns of information presented in context; and feedback that improves and coaches a learner to improve their performance.

For learning to be meaningful it must be regarded as personally relevant by the learner. When a child finds little relevance in a learning task or is unable to see how the learning links with previous experiences and knowledge the child is less likely to engage in the learning process. (Jensen, 1998)

Strategies that engage learners’ thinking skills are critical.
During the years 3, 4 and 5 memories (including school learnings) that have been frequently used or are seen as having high importance are strengthened in the brain. Memories that are less used or considered of lower relevance to the child are lost from the brain’s storage. (Diamond, 1988)

This ‘pruning’ of memories within the brain suggests the need for students to re-visit knowledge or skills on a regular basis in order to retain this previously learnt material.

Concentration increases in the years 3, 4 and 5 learner with the brain now able to be more logical and to process information from previous experiences and a range of contexts. This more involved thinking process implies that learners will need more time to process and access previous knowledge and understandings. The variation in thinking time can differ considerably between individual children.

Students require more time to reflect and process information before responding to a direct question. Increasing ‘wait time’ (the time between asking a question and expecting a response) is one strategy for allowing more children time to engage with questions.

The effects of feedback on the performance of a year 3, 4 and 5 learner can be very significant to their future engagement in learning tasks. Learners who gain positive feedback about their work have a more positive approach to their own ability in tasks whereas the learner who is given negative feedback will accept a lower level of self worth and possible achievement. This is the age when responses to emotions are ‘hard-wired’ in the child’s brain.

A child’s progress through increasing levels of difficulty through the middle years should be individually determined to avoid negative feedback and failures against ‘mainstream’ standards.

A child’s self concept is shaped by their experiences. For students, negative experiences at school (fear of threat, failure, punishment or embarrassment) can lower their self-concept, producing a chemical reaction in the brain. This reaction can interfere with the brain’s ability to concentrate on the learning task on hand, and may result in poor classroom behaviour or concentration levels. (Goleman, 1995)

Activities that promote resilience and tolerance, and promote a higher self-concept, are vital in the learning for year 3, 4 and 5 children.


The human brain processes information firstly with matters concerning survival, next with matters of emotional significance and finally with new learning that may be useful at some point in the future

(Sousa, 1995)

Social and Emotional Development

What are the main characteristics evident in the social and emotional development of children between the ages of eight and 11 years?

Characteristic of this age group is the ability to become more independent from the immediate/extended family. As this occurs children learn to develop closer relationships with peers and other adults. They begin to listen to advice from friends as well as adult figures.
Year 3, 4 and 5 girls and boys spend increasing amounts of time during the day with their peers developing closer relationships and exploring wider points of view. They realise that their peers have different status in the classroom, which increases their sensitivity towards being socially accepted by their peers in their school environment.

**Children require explicit teaching and frequent opportunities to develop social and group skills with their peers.**

Children at this age are capable of determining their own viewpoint and where they stand on issues. They become actively aware of issues of justice and fair play and become interested in the welfare of others. They need to develop skills at interpreting other people’s intentions and begin to understand people can feel one way yet behave in another.

**Involvement in discussions, problem solving, decision-making and debates provides years 3, 4 and 5 children with the opportunities to explore and develop skills to become critical learners.**

Play is just as purposeful and creative for year 3 to 5 girls and boys as it is for those younger, for constructing knowledge. Children at this age participate in socially agreed upon games and increasingly become interested in real life tasks and activities. Play can be extended to include creative dance, dramatic role play (for example, taking on perspectives of others, trying on roles) and includes indoor play such as construction or strategy ‘thinking’ games. (Cole & Cole, 1993)

**Allowing time for creative play strategies within the classroom program of year 3, 4 and 5 students encourages social interaction and promotes the expression of feelings and emotions with peers. Becoming a critical consumer of digital games and exploring the use of popular culture themes as portrayed by the media also allows for powerful learning within the classroom.**

Girls and boys in years 3, 4 and 5 develop a self-concept with particular reference to two ways of thinking about themselves:

- how they see themselves in relation to their peers - with their success being defined in terms of their relationship to the social group
- how they see themselves in relation to certain characteristics - for example, their performance.

(Damon & Hart, 1988)

During years 3, 4 and 5 friendships tend to be almost always of the same sex. Boys tend to have more friends of different ages and stay in larger groups, but girls’ friendships tend to be more intimate. By 10 to 11 years, towards the beginning of adolescence, there is more interest shown in developing friendships with peers of the opposite sex. (Cole & Cole, 1993).

**Children need opportunities to develop their social skills in a variety of structures and varying group dynamics.**

Children start becoming more self-conscious of their own abilities or appearances. The emergence of mood swings may occur as children learn how to deal with feelings of rejection or failure, fears of school, confusion over social relationships or family problems. As they learn to see things from another’s point of view more clearly they begin to recognise other people have feelings and needs.

**Opportunities to work at their own learning level is a vital component to supporting students to feel success and achieve learning that is relevant and timely for them as individuals.**

Children of this age become more aware of the consequences of their own behaviour. It is during this time that behaviour can often be managed through verbal reasoning or appeals to their sense of humour. (Cole & Cole, 1993)

**Conflict can often be resolved through peer judges who accept or reject their actions.**
What questions does this evidence raise about how my teaching practice supports the physical, cognitive, social and emotional development of children in years 3, 4 and 5 in my class?
For example:
- classroom programming
- teaching methodologies
- catering for individual student needs

What questions does this evidence raise about the school practice to support the physical, cognitive, social and emotional development of children in years 3, 4 and 5 in my school?
For example:
- resourcing
- school priorities/objectives
- staffing
- professional development
- community involvement.

Resources

Bibliography
Education Department of South Australia (1988) Children and learning in the primary years. Education Department of South Australia.

Further papers elaborating on issues raised in this paper can be found on the SACSA website.
www.sacsa.sa.edu.au under the Learners and Learning – About Learners - Primary years - button

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