In an increasingly complex world, being able to read, write, add, subtract, divide and multiply is crucial.

Great start – Strong foundations – Powerful learners: A Numeracy and Literacy Strategy from birth–18 will guide teachers and other school staff, early childhood workers, health workers and importantly, parents, to give children the best start possible.

South Australian students do very well in numeracy and literacy – significantly better than most other countries. However, national testing has revealed there are gaps. We need to provide additional support to children – so small hurdles don’t become insurmountable obstacles down the track. For those children who are doing well we need to further challenge them to help them reach their potential.

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However, national testing has revealed there are gaps. We need to provide additional support to children – so small hurdles don’t become insurmountable obstacles down the track. For those children who are doing well we need to further challenge them to help them reach their potential.

Acknowledging parents as the ‘first teachers’ for their children and equipping them is paramount. Initiatives in this strategy, including using the ‘Blue Book’ – which records a baby’s development from birth – are at the heart of how we intend to support parents to start the learning process and guide their children as they grow.

This strategy builds on work already underway in our schools, preschools, day care and early learning centres across the State including the National Literacy and Numeracy Partnership, which is providing $19 million to support and improve standards.

It epitomises our Government’s priority to provide Every chance for every child and underpins our State’s pursuit of prosperity for all.

Research shows that for a country, increasing literacy by 1% can lead to a 2.5% increase in productivity. For a child, the benefits can be immeasurable.

Thank you to everyone involved in developing this strategy. The overwhelming feedback and extended consultation is testament to the importance South Australians place on literacy and numeracy – and the Weatherill Government’s commitment to listening to the community.

A child’s development is continually evolving – and so will this strategy. We will continue to listen to parents, carers, teachers, community leaders, service providers and, importantly, children and young people, think about how we can improve literacy and numeracy.

Supporting children to gain these skills sets us all up for the future. That’s why getting it right – from the very beginning – is so important.

The Honourable Jennifer Rankine
Minister for Education and Child Development
Introduction

Numeracy and literacy skills are crucial to every child and young person’s ability to develop as an individual, to live a satisfying and rewarding life and to actively participate in our society. We are educating children and young people in a time of increased awareness about the importance of learning and education from birth and throughout a person’s life. Simultaneously, we are experiencing the exponential change that technology brings to the way we communicate, learn and work as well as to our individual, local and global identities.

Parents in South Australia want the best education possible for their children, regardless of where they go to learn. They want their children to graduate from school having choices and the confidence to pursue them. Engagement in learning and the contribution this makes to a child’s wellbeing is a high priority for every early childhood and school community.

Research shows that highly developed numeracy and literacy capabilities strongly contribute to the social, economic and physical wellbeing of individuals. Children who are able to apply mathematical understanding and communicate effectively in a range of contexts – economic, technical, scientific and social – are best placed to succeed in education and in life.

Parents recalled the influence of teachers and careers advisors in shaping their career choice. There were a number of poignant accounts about how teachers had shaped their beliefs about their capacity and place in the world.

Parents, SA numeracy and literacy strategy consultation (2013)
A highly numerate and literate population is also important to the health and prosperity of our State and to productivity and workforce involvement. Young people who are unable to communicate successfully because they cannot read or write well, or who struggle with numeracy skills, often leave school early and are more likely to be unemployed or in low-skilled jobs.

For our State to thrive in a rapidly changing global economic climate, we need citizens who not only possess the foundations of numeracy and literacy, but are able to apply them powerfully, with the confidence and capacity to continue to learn.

By international standards, most South Australian children and young people do well in learning the foundational skills of numeracy and literacy. However, we know that some of our learners are not developing these skills as well as they should. This strategy, based on current evidence, provides a clear agenda for collaborative action.

Great start, Strong foundations, Powerful learners is designed to ensure that all young people leave school able to understand and use mathematics in their everyday lives and in further learning, and able to read, communicate orally, in writing and through digital media.

In particular, this strategy sets an ambitious goal to prepare all young people for the future by enabling them to become confident and powerful learners, who use numeracy and literacy successfully in every aspect of their lives. Throughout their development, whether aged 2 or 15, we aim for every child or young person to confidently and successfully engage in learning.

The Numeracy and Literacy Strategy is part of the Brighter Futures agenda and builds on existing effective practices and resources, in partnerships with key professional associations, reference groups and specialists. In January, 2013, a new numeracy and literacy unit was formed in DECD to bring together work from across the agency and provide leadership and coordination for the strategy.

The strategy will be introduced progressively in early childhood settings, schools and the wider community from 2013 with short, medium and longer-term goals being achieved over the next five years. Resources already invested in numeracy and literacy will be reviewed and aligned to support achievement of our goals.

There will be a concurrent and ongoing evaluation to ensure that the actions being undertaken through the strategy by educators, leaders, parents and families, are resulting in improved educational experiences and outcomes for our children and young people. Findings from this evaluation will regularly inform refinements and additions to the strategy as it progresses.

Only by equipping tomorrow’s workforce with the capacity to think smart, can South Australia’s industries thrive in the next century. This involves helping children, from the earliest ages, to acquire the creativity and ingenuity to address the challenges of the future.


Benefits of Brighter Futures
1. Higher standards of achievement for children and young people
2. Improved health and wellbeing outcomes for children and young people
3. Better family and carer support for children and young people
4. Stronger community-led engagement in determining local provision
5. Greater emphasis on the views of children and young people in shaping policies and practices that affect them

The Brighter Futures Programme, DECD (2013)
What it means to be numerate and literate today has changed dramatically from the past. Our children are growing up in a global, technologically sophisticated and information-rich environment.

As technologies continue to change ever more rapidly, they have a huge influence on the way our children and young people communicate and learn. Having a sound understanding of numeracy and literacy and how to apply these in a rapidly changing world is a springboard to success now and in the future.

Numeracy

Numeracy is related to, but not the same as mathematics. While explicit learning in mathematics contributes to the numeracy development of children and students, it is the ability to use mathematical information to solve problems and respond successfully to day-to-day challenges that makes a young person numerate.

The Organisation for Economic Cooperation and Development (OECD, 2012) defines numeracy as:

“... the ability to access, use, interpret and communicate mathematical information and ideas, in order to engage in and manage the mathematical demands of a range of situations in adult life.”

The Early years learning framework for Australia, which guides the curriculum for educators of young children in childcare and preschool, describes numeracy this way:

“The capacity, confidence and disposition to use mathematics in daily life. Children bring new mathematical understandings through engaging in problem solving. It is essential that the mathematical ideas with which young children interact are relevant and meaningful in the context of their current lives. Spatial sense, structure and pattern, number, measurement, data argumentation, connections and exploring the world mathematically are the powerful ideas children need to become numerate.”

The Australian Curriculum, which now provides a consistent curriculum statement for schools across the nation, has this to say about numeracy:

“Students become numerate as they develop the knowledge and skills to use mathematics confidently across all learning areas in school and in their lives more broadly. Numeracy involves students in recognising the role of mathematics in the world and having the dispositions and capacities to use mathematical knowledge and skills purposefully.”

Numeracy is defined in the South Australian Certificate of Education (SACE) as:

“... the ability to understand, analyse, critically respond to and use mathematical knowledge, skills, concepts and technologies in a range of contexts.”

The common themes from these descriptions are that children and students acquire the dispositions (habits), capacities (abilities) and confidence to use mathematical skills and information in a range of situations – both in learning and in the world beyond education.

“Mathematical literacy is an individual’s capacity to identify and understand the role that mathematics plays in the world, to make well-founded judgements and to use and engage with mathematics in ways that meet the individual’s life as a constructive, concerned and active citizen.”

Importantly, this description goes beyond mere computation – it includes essential skills such as solving problems, understanding and explaining the solutions, making decisions based on logical thinking and reasoning, and interpreting data, charts and diagrams.

The age of information technology presents us with more data than ever before and puts an ever greater premium on numeracy skills and understanding.

National numeracy for life (UK) 2013
Literacy

Literacy is often thought to involve reading, writing and understanding the conventions of language. While these aspects are very important, they do not cover the entire field we call literacy.

The OECD (2009) provides this definition:

Literacy is the ability to understand, use and reflect on written texts in order to achieve one’s goals, to develop one’s knowledge and potential, and to participate effectively in society. (OECD, 2009, p14)

The Early years learning framework takes this description further:

Literacy is the capacity, confidence and disposition to use language in all its forms. Literacy incorporates a range of modes of communication including music, movement, dance, storytelling, visual arts, media and drama, as well as talking, listening, viewing, reading and writing. Contemporary texts include electronic and print based media. In an increasingly technological world, the ability to critically analyse texts is a key component of literacy. Children benefit from opportunities to explore their world using technologies and to develop confidence in using digital media.

The Australian Curriculum tells us that:

Students become literate as they develop the knowledge, skills and dispositions to interpret and use language confidently for learning and communicating in and out of school and for participating effectively in society. Literacy involves students in listening to, reading, viewing, speaking, writing and creating oral, print, visual and digital texts, and using and modifying language for different purposes in a range of contexts.

The SACE describes literacy as:

... the ability to understand, analyse, critically respond to and create written, oral and visual communications and to use information and communication technologies in different contexts.

Definitions of literacy have changed over time to parallel changes in our society, economy and culture. There is a growing acceptance of the importance of lifelong learning and this in turn has expanded the views and demands of reading and literacy. The types and levels of literacy skills necessary for economic participation, citizenship, parenting and individual advancement in the 1800s were different from those needed in the 1990s and those required for the future are changing even more rapidly than before. Technology drives much of the economy in the 21st century and citizens are expected to know how to communicate in more complex ways.

T Scott Murray, Yvan Clermont and Marilyn Binkley (2005)
The common themes in these descriptions of literacy are about children and young people being able to:

- find information in texts, speech, images and symbols
- interpret information and pull ideas together
- stand back from information and connect it to their own experience and understanding
- communicate their understanding to others, either through speaking, writing or using multimedia.

The literacy development of children and young people in education is strongly supported by explicit learning in the learning area of English. Both numeracy and literacy are strengthened, extended and enriched as students engage with other learning areas and a wide range of familiar and unfamiliar experiences.

Positive attitudes and competencies in numeracy and literacy have their foundations in early childhood experiences – in families, playgroups, preschools and early education and care settings. Having a strong start to each new phase of learning allows children and young people to build the foundations they need to be highly numerate and literate and to develop their capabilities as powerful learners.

Literacy involves ‘reading the world and the word’ in a variety of contexts

Paulo Freire and Donaldo Macedo (2001)

Children and young people need ‘creative literacy’, through a variety of media. Literacy includes creativity

Parent, SA numeracy and literacy strategy consultation (2013)
Where South Australia is now

A number of studies, including the recent Australian Early Development Index (AEDI 2012) and the 2008 final report by Adelaide Thinker in Residence, Dr Fraser Mustard, Investing in the early years: Closing the gap between what we know and what we do, identified that nearly a quarter of young children in this State are developmentally vulnerable at the time of school entry. This has a direct influence on their numeracy and literacy development.

A 1995 study by U.S researchers Betty Hart and Todd Risley demonstrated that children who, in their early years, do not experience regular, quality conversations in the home and community, can be exposed to as many as 30 million fewer words, by age three, than counterparts who have had these opportunities. Early experiences are known to have a profound influence on the brain and language development of young children. It is in everybody’s interest that all children have a great start so that the level of developmental vulnerability is reduced in our communities.

In terms of the National Assessment Program – Literacy and Numeracy (NAPLAN) our results show that there is a group of students who do not achieve the National Minimum Standard. A focus on building the foundational skills of literacy and numeracy for all children will enable more to go past the national minimum level.

NAPLAN, PISA, and TIMSS results all point to South Australian children and young people needing greater capability to solve problems, to develop inferential reasoning and to confidently deal with new and unfamiliar situations.

This confidence is vital with numeracy, which, in the past, has been viewed negatively by many young people, teachers and adults.

The OECD analysis of PISA showed that young people who enjoyed reading performed better in the PISA reading test. This applies equally to numeracy and mathematics – young people who enjoy it and feel confident will be likely to achieve more highly. This is what we want for all of South Australia’s children and young people.

The evidence before us highlights three key areas for improvement:

- Ensuring all children have a great start in their literacy and numeracy learning
- That more attain stronger foundational skills
- That all children and young people have the opportunity to engage powerfully in their learning. This will enable them to become skilful problem solvers with the ability to make use of their numeracy and literacy capabilities.

Children with additional health and development needs are at increased risk for a range of poor psychosocial and educational outcomes, including school disengagement.

Australian Early Developmental Index Report (2009)

We are well into a new era where innovative societies are not only sustained by a limitless supply of ideas and imagination, but also by the ability to comprehend, compute and convey them. Numeracy and literacy facilitate all of these activities and in turn, fosters a nation’s standard of living and quality of life. They are the great enablers.

Frank McKenna (2007)
Our ambition and challenges

We want a South Australia in which all children have the essential numeracy and literacy skills and understandings to participate actively and successfully.

Equally, we cannot afford a society where most children reach the middle range of achievement and are not sufficiently equipped to be powerful learners – to solve problems and think innovatively in order to deal with the issues and unfamiliar situations that constantly arise in a rapidly changing world.

Our ambition as a State is to improve educational outcomes for every child. With this goal in mind, we face three fundamental challenges:
Challenge 1: A great start

To ensure all children are given the support they need to develop their language and learning skills so that the gap in numeracy and literacy growth between young children is narrowed and that all children start school with age-appropriate numeracy and literacy awareness and skills.

Challenge 2: Strong foundations

To increase the number of children who attain foundational numeracy and literacy skills in their first four years of school, and ensure these strong foundations are consolidated and built upon throughout their years of schooling.

Challenge 3: Powerful learners

To build the learning power of all children and students by increasing their ability to use high-level thinking skills and apply what they have learned in new and increasingly complex situations.

These challenges interrelate and are consistent with the 2008 Melbourne Declaration of Education Goals for Young Australians, which stated that:

- successful learners … develop their capacity to learn and play an active role in their own learning … (and) have the essential skills in literacy and numeracy and are creative users of technology, especially ICT, as a foundation for success in all learning areas
- when children and young people are able to think critically and creatively, readily adapt to change, apply what they know to complex real-life situations and plan and manage their own learning, they are on the road to becoming powerful life-long learners and active and informed citizens.

The new 3Rs

….. reasoning, resilience and responsibility are requirements of the workers in the next generation economy to find science, technology and environmental solutions to increasingly complex problems.

Lethbridge Herald, Alberta (2008)

The strategy builds on the work already undertaken in the early years and in schools. Through immediate new initiatives and a longer term agenda for powerful learning, we will position our children and young people and our State positively for the future.
The drivers for the strategy

Parents, carers and families, teachers and leaders

The success of this strategy and our ability to meet our challenges will depend on the efforts of three important groups of people: parents and families, teachers and leaders working together. It is people who make a difference and as partners with children and young people, all having common high expectations, we can make a positive difference in numeracy and literacy achievement for every learner.

In the second half of 2012, the department undertook a review of local, national and international research and evidence, to add to the practical experience and knowledge in our preschools and schools. A discussion paper, Numeracy+Literacy, was released for discussion with the South Australian community.

The role of the school in academic achievement was not just to provide tuition, but to recognise the strengths and aspirations of each child, to know what ‘excellence’ means for each child and to set high expectations. Parents were particularly sensitive to the power of teachers and the education system to shape children’s views of themselves as learners, both positively and negatively.

Parents, SA numeracy and literacy strategy consultation (2013)
Common themes emerged from the consultation:

- Parents and families would like more information about how to support their children in numeracy and literacy development
- Parents and families would like to better understand the expected level of numeracy and literacy achievement for their children
- Parents and families would like to be more closely connected and involved with early childhood settings and schools to better understand how their children learn
- Educators would like greater clarity about effective programs, practices and approaches in numeracy and literacy
- Educators would value greater consistency in assessment practices and data analysis to help them design tailored and targeted learning
- Educators would value more consistent diagnostic assessment processes to better track and report on each child’s progress and achievement
- Educators would value coherent, high quality professional learning to enhance their practice in order to improve student learning outcomes
- Children and young people want a say in how they learn.

The consultation also helped to identify three drivers – key factors that will help to make a significant difference to numeracy and literacy achievement across the State:

- Inspiring teachers and educators, challenging children and students to achieve their best
- Active parents and families, collaborating in learning partnerships with early childhood settings and schools
- Successful 21st Century leaders, leading the learning.

These drivers are connected by common high expectations and numeracy and literacy achievement standards.

Each of these drivers focuses on meeting our three key challenges in both numeracy and literacy Great start – Strong foundations – Powerful learners.

For example, Driver 1, in aiming to have a great start for all, will focus on providing more equitable outcomes for early learners. It will look to ensure good foundations and will also focus on enabling all young learners to develop powerful learning capabilities and dispositions from birth onwards.

Making great teaching happen for every child, every day, in every classroom is the single most important means by which schools can deliver on their promise to enable all children to learn and achieve at high levels

Robert Peterkin (2007)

Recognising the economic and social value that derives from providing the very young with the foundations for a healthy and successful life is essential to South Australia’s future.

Dr J Fraser Mustard (2008)
Challenge 1:
A great start

Making sure more children have a great start to their numeracy and literacy learning

Young children thrive when their parents and carers speak with them, read to them, sing with them, play with them and encourage them to explore their world and ask questions. We know that the messages parents and other adults give about the importance of mathematics and numeracy have an enduring effect. Therefore, when parents and carers support their children to notice the world around them, the shapes, the numbers and the ways in which people communicate and use mathematics, they are enhancing children’s early numeracy and literacy development.

Their learning and their ability to continue to learn are further developed when they are encouraged to play with others, develop their curiosity, engage in conversations, and question what they see around them.

These simple things are amongst the most important contributions that parents and carers can make to their child’s numeracy and literacy development.

In South Australia at present, most children have a great start to learning in numeracy and literacy. The way families, teachers, care workers and other professionals are connecting and working together is enabling children to have a range of quality experiences that:

Parental involvement is key to development of literacy skills. Numerous studies attest to the profound influence of parents. Early literacy develops from the many parent-child interactions around everyday experiences such as noting signs while shopping, informal parent commentary on what’s happening throughout the day and listening to stories.

Adele Thomas (2001)
• build their vocabulary
• develop their communication skills
• help them make sense of words, symbols, shapes and numbers
• enable them to notice and ask questions about the world around them.

The field of neuroscience has contributed a great deal to our understanding of how early experiences influence the brain development of young children. There is evidence that babies begin to learn even before they are born. What happens in the first four years of a child’s life has a major effect on their wellbeing, behaviour, social development and learning in the years that follow.

Healthy physical, emotional and social development supports children to engage with and benefit from early learning experiences. Collaborative relationships between parents and caregivers and early childhood health and education professionals provide a supportive learning environment in which children can thrive.

Numeracy understanding for babies and young children grows through the conversations and experiences that come out of a child’s curiosity, exploration, what they notice and the questions they have about the world around them.

Literacy begins with the gestures and sounds that enable a baby to connect with people. This extends to communication through words, symbols and drawings. As children have opportunities to enjoy the rhyme and rhythm of songs and poems and the wonder of stories and information about the world, they establish important understandings about the various ways that groups of people communicate and create.

Evidence from the Australian Early Development Index (AEDI) tells us, however, that there is a group of children across the State who do not have as good a start with numeracy and literacy learning as we would wish.

It is vital that we identify and respond to any such developmental concerns early. We know that when children begin preschool and school well behind their peers, the gap is more difficult to reduce as they grow older. Taking effective action, in partnership with families, to address developmental concerns is critical to ensuring that all children are able to establish their longer term capabilities in numeracy and literacy.

The constructive work that children do with language before they get to school is astonishing enough, but even more amazing is the ease with which they do it and how unthinkingly adults just do the right things to make it possible. They talk with children.

Between one and five years, children all over the world master the language of the community – children learn it all in conversation.

Marie Clay (1993)

Childhood is the time to establish a firm foundation of resilience and the basic resources of curiosity, play, imagination and the mastery of language.

Guy Claxton (2009)

Children are born citizens – their rights should be respected by the community and family, not as ‘property’, but as a common good to be supported by the community.

Professor Carla Rinaldi (2013)
The consultation in 2012 provided clear feedback about the importance of maternal health and wellbeing to a child’s development and longer-term future. This is supported by current research that describes how a mother’s health – even prior to becoming pregnant – lays the groundwork for a child’s wellbeing over a lifetime.

The influence that family experiences have on a young child’s development is also profound. A baby’s first attachments with family members and the trusting relationships they build with others provide them with a secure base for exploration and learning. Their ability to self-regulate and to make connections outside of the family is shaped by early experiences.

To support healthy development and wellbeing of babies and young children, the Numeracy and Literacy Strategy will:

- promote the monitoring of every child’s development, through the use of the ‘Blue Book’ as a common source of information for families and health and education professionals, as well as establishing ways of monitoring children’s early numeracy and literacy development
- promote family participation in child health checks – particularly the 18-24 month health check – and include advice about numeracy and literacy development
- provide information and support to service providers to ensure they are able to assist families with advice on children’s numeracy and literacy development.
Babies, toddlers and young children learn to extend their play and communicate and share with others through involvement in social settings, such as playgroups, childcare, preschool and school. Interactions with peers and key adults in their lives help to mould their emotional, social and cognitive development. This provides the basis for their numeracy and literacy.

The Australian Research Alliance for Children and Youth (ARACY) has looked extensively into what most helps the healthy development of children and young people. Their research shows how important a positive home and community environment is and how effective partnerships between early childhood settings and schools and families support a child’s learning.

To further support parents, carers and families in providing strong support for their children’s learning, the Numeracy and Literacy Strategy will:

• ensure provision of targeted referral processes that link families to community support and build their capacity to support the numeracy and literacy development of their children
• increase the number of supported playgroups in preschools and schools so that families have access to regular, play-based early learning activities which include a focus on numeracy and literacy development
• develop online and other resources for parents on numeracy and literacy
• develop courses and workshops for parents to support their children’s numeracy and literacy development.
Meaningful Experiences in the Everyday Experience of Young American Children 2003.

A 1995 study by U.S researchers Betty Hart and Todd Risley demonstrated that children who, in their early years, do not experience regular, quality conversations in the home and community can be exposed to as many as 30 million fewer words by age three, than counterparts who have had these opportunities.

Closing the gap between what we know and what we do, identified that nearly a quarter of young children in this State are developmentally vulnerable at the time of school entry. This has a direct influence on their numeracy and literacy development.

Australian Early Development Index (AEDI 2012) and the 2008 final report by Adelaide Thinker in Residence, Dr Fraser Mustard

The success of this strategy and our ability to meet our challenges will depend on the efforts of three important groups of people: Families and communities, teachers and leaders working together.

**GREAT START**
To ensure all children are given the support they need to develop their language and learning skills so that the gap in numeracy and literacy growth between young children is narrowed and that all children start school with age-appropriate numeracy and literacy awareness and skills.

**STRONG FOUNDATIONS**
To increase the number of children who attain foundational numeracy and literacy skills in their first four years of school and ensure these strong foundations are consolidated and built upon throughout their years of schooling.

**POWERFUL LEARNERS**
To build the learning power of all children and students by increasing their ability to use high-level thinking skills and apply what they have learned in new and increasingly complex situations.
The success of this strategy and our ability to meet our challenges will depend on the efforts of three important groups of people: parents and families, teachers and leaders working together. It is people who make a difference and as partners with children and young people, all having common high expectations, we can make a positive difference in numeracy and literacy achievement for every learner.

**TEACHERS**
and the excellence of their practice

**FAMILIES & CARERS**
as partners

**LEADERS**
and their ability to lead learning
Challenge 2:
Strong foundations

Supporting every child to be successful in learning and life

An expectation of success for each and every child underpins this Numeracy and Literacy Strategy. This success is based on each child and young person having a good foundation of important numeracy and literacy skills. These are often described as basic mathematical and English skills, but importantly, they require the ability to use the skills, not just to know them.

Supporting children and young people in their learning and challenging them to aim higher is a key factor in maximising their achievement.

We have learned much in recent times about the most effective ways to assist children and young people with learning at each stage of their development. This has been possible because of:

- research from the neurosciences into how children and young people learn best at different ages and stages
- the use of new learning technologies
- an increasing evidence base regarding learner engagement and pedagogy (the design of learning experiences)

Findings from various areas in developmental psychology suggest that everything that happens to us – the music we hear, the people we love, the books we read, the kind of discipline we receive, the emotions we feel – profoundly affects the way our brain develops. In other words, on top of our basic brain architecture and our inborn temperament, parents have much they can do to provide the kinds of experiences that will enable a child to develop a resilient, well-integrated brain.

Daniel Siegel and Tina Payne Bryson (2012)
The consultation showed that there is wide agreement about the crucial importance of children and young people developing numeracy and literacy foundation skills and understanding. Strong foundations are a springboard to the powerful learning that leads to mastery of the curriculum and participating fully in society.

The Early years learning framework outlines the learning skills, knowledge and dispositions young children develop and demonstrate in their numeracy and literacy growth. Numeracy in the early years includes understandings about numbers, patterns, measurement, spatial awareness and data as well as mathematical thinking, reasoning and counting. Literacy broadly includes a range of modes of communication, including music, movement, dance, storytelling, visual arts, media and drama, as well as talking, reading and writing.

Within the Australian Curriculum, the foundation skills for numeracy are built predominantly in mathematics and for literacy, primarily in English.

In mathematics, students learn key content in number and algebra, measurement and geometry, and statistics and probability and, through the proficiencies of fluency, understanding, reasoning and problem-solving, the application of mathematical knowledge and skills across the curriculum.

The application of mathematical skills and knowledge in a range of contexts is described by the numeracy continuum in the Australian Curriculum. The continuum describes foundational skills in aspects of numeracy as they develop through the years of schooling, including the numeracy demands relevant to all learning areas. These numeracy capacities allow students to apply mathematical skills in authentic contexts using appropriate mathematical language.

In English, students learn knowledge and skills in literacy, language and literature. The Australian Curriculum’s literacy capability describes literacy as comprehending texts through listening, reading and viewing, and composing texts through speaking, writing and creating. The literacy continuum describes the foundational literacy skills students should typically be able to accomplish, increasing in complexity through the years of schooling.

Throughout the years of schooling up to, and including SACE level, literacy and numeracy skills and understandings are put to increasingly sophisticated uses in mathematics, English and across the curriculum.

Throughout a child’s education, families contribute a great deal to their numeracy and literacy development. By providing an environment rich in conversation, printed media and different experiences, the home and local community provide a strong base on which early years settings and schools can work to further build earning competence.

There was a high level of consensus about the speed and scale of changes in the world, that these changes were profoundly impacting on their children now, and that the pace of change would accelerate. Most of the parents were somewhat anxious about their children’s future in all of the key domains of life – relationships, employment, food supply, health and the natural environment. They were aware that what passes for valued knowledge now, might not be useful or valued in the future.

Parents, SA numeracy and literacy strategy consultation (2013)

Children are more likely to learn when they have structured home environments where parents indicate both expectations about learning and adapt these expectations given child-specific needs and personality.

Barbara Schneider, Venessa Keesler and Larissa Mortlock (2010)
Improving the numeracy and literacy foundation skills and knowledge of children and young people and monitoring this development in relation to their age appropriate standard is key to their future learning. Teachers, parents and carers and leaders make a difference in the process and working together will provide the environment for improvement.

To assist parents, carers and families with supporting their children’s learning, this Numeracy and Literacy Strategy will provide:

- information to families about what happens in the early years and in schools to build the numeracy and literacy skills and understandings of children and young people
- families with quality information, through a variety of accessible media, about how the home learning environment can best contribute to numeracy and literacy learning.

Teaching young children ways to ‘learn how to learn’ is key to early years education. As young children develop the processes of learning constructively, they are expanding the capability of their brains.

Pinnell and Fountas (2012)
The strategy will support teachers, educators and leaders to:

- continue to plan for numeracy and literacy improvement for all children and students
- monitor student achievement in numeracy and literacy to determine progress using consistent and agreed statewide measures
- identify and implement effective intervention strategies for students not achieving minimum standards
- extend professional knowledge, understanding and practice in numeracy and literacy through building on their existing professional learning, coaching and mentoring practices.

To ensure a strong foundation, the strategy sets a benchmark for all children and young people to be achieving at their age and year level appropriate standard. This includes:

- every preschool and school developing annual numeracy and literacy targets that aim to gain growth in achievement and develop powerful learners
- implementing progress indicators to track numeracy and literacy development for preschool children. This will support educators in planning numeracy and literacy learning and working with and reporting to parents
- implementing a ‘one plan’ approach to identify support and intervention for students who are behind their year or age level. These plans will focus on specific next learning steps for each of these students
- using the Early years learning framework, the Australian Curriculum achievement standards and the Numeracy and Literacy Continuums to regularly assess and report on progress against their year-level standard
- committing to assessing every child and young person’s achievement progress using recommended annual norm-referenced tests and other benchmarks including instructional reading levels. This information will be reported to parents
- supporting schools and groups of schools to use audit processes to develop consistency of teacher judgement against achievement standards.

Where children and young people are at risk of falling behind their age or year level standard, they will have a learning plan that specifically focuses on how growth in their achievement will be attained.

It is by setting this benchmark for our children and young people that we commit to building strong foundations for all.

Public education has a new mission – it is about learning to learn, about becoming independent thinkers and learners. It is about problem solving, team work, knowledge of the world, adaptability and comfort in a global system of technologies, conflict and complexity. It is about the joy of learning and the pleasure and productivity of using one’s learning in all facets of work and life pursuits.

Building the learning power of all children and young people

Our State needs a bold approach to ensure our children and young people are at the highest level of achievement and capability by Australian and world standards. Our evidence is that most of our children and young people do well in their learning but too few experience higher levels of achievement or demonstrate the capacity to be powerful in their learning.

Powerful learning is not a subject to be studied but is something children and students do every day in their learning. It is not based on notions of personal power or power over others. Rather it refers to learners who have the curiosity, creativity and confidence to:

- actively participate in their learning
- make decisions based on sound evidence
- skilfully solve problems and deal proactively with new situations
- communicate effectively in a variety of forms
- collaborate with others.

Powerful learners also have what Professor Carol Dweck terms a ‘growth mindset’ – the belief that they are capable of learning and achieving with effort.

Strong numeracy and literacy development enables aspiring powerful learners to achieve these qualities.

Our children will be the people who can move the State forward and contribute to growth and productivity.

Parent, SA numeracy and literacy strategy consultation (2013)

In the growth mindset, people believe that their talents and abilities can be developed through passion, education, and persistence. For them, it’s not about looking smart or grooming their image. It’s about a commitment to learning—taking informed risks and learning from the results, surrounding yourself with people who will challenge you to grow, looking frankly at your deficiencies and seeking to remedy them. Most great business leaders have had this mindset, because building and maintaining excellent organizations in the face of constant change requires it.

Prof Carol Dweck (2006)
We have to rethink the fundamental principles on which we’re educating our children. And the only way to do this is by... seeing children as the hope they are. We may not see the future but they will. And our job is to help them make something of it.

Sir Ken Robinson (2013)

Creativity is deep in our State’s DNA. But we must draw deeply on this tradition if we are to meet the challenge and grasp the opportunities before us. This begins right at the start, in our system of early childhood development, our schooling and tertiary education sectors. We must encourage creativity in each of our citizens. We need to foster a new class of entrepreneurs, willing to take risks.

Working alongside inspiring teachers and educators, powerful learners have their prior knowledge, culture and experience valued and built upon. They are challenged and engaged in rich, purposeful tasks in meaningful and relevant contexts. They further build their numeracy and literacy expertise through explicit and timely support as they participate in deep learning across the curriculum.

Powerful learning also benefits from strong partnerships between early childhood settings, schools and families. Communities are important places for children and young people to extend and apply their numeracy and literacy knowledge and skills.

To ensure that children and young people are developing their capacities as powerful learners, the Numeracy and Literacy Strategy will:
- call on the expertise and energy of our teachers and support them in developing practices for all children and young people to be powerful and successful in their learning
- host a powerful learning summit that brings together teachers and leaders from SA with experts in the field of powerful learning.

This summit will clarify the powerful learning future that we want for our children and young people and what strategies we will employ in both numeracy and literacy to ensure they are powerful in their learning
- develop support materials, workshops and courses for teachers on developing powerful learners
- ensure that Respect Reflect Relate and Teaching for Effective Learning is used to enable teachers to reflect on their practices and adapt them to ensure higher achievement for children and young people
- report to parents on their children’s development as powerful learners, including their confidence, capacity to solve problems, think creatively, and engage with new knowledge in numeracy and literacy
- use SACE and the Australian Curriculum general capabilities to describe what we believe to be the graduate qualities that all who finish primary school and high school will possess
- involve children and young people more in providing feedback to their teachers and the system and evaluating and making decisions about their own learning.

In an ideal world, the teacher would have precise and current knowledge of each student’s starting points and also of what assistance each student needs to move to the next level.

Michael Fullan (2011)
Common high expectations and standards

The Numeracy and Literacy Strategy will be driven by the actions of parents and families, school leaders and teachers. The link between these groups is the high expectations and aspirations they share for the children of South Australia.

Research tells us that when families, the community and educators have high expectations of children and students, high achievement is more likely. Students who are expected to learn and are supported and challenged to do so at a complex and sophisticated level are invariably more engaged and successful.

By the term ‘standards’, we mean the level of proficiency or achievement we expect of a child or young person for their age. Standards enable us to have clear and high aspirations for all. While every child and young person will not progress at the same rate, they are all capable of growth in their learning and our expectations of them should reflect this.

Therefore, our goal is that all children and students will be working at their age level or appropriate year level and demonstrating continuous progress in their learning against relevant standards of achievement.

Progress indicators in the Early years learning framework, the achievement standards in the Australian Curriculum and the performance standards in the SACE comprise the relevant standards by which educators monitor the progress and achievement of children and young people.

This assessment of progress, by those who work with our children and young people every day, is the most critical one, because it is the basis on which the next steps in learning are planned for every individual learner.

To assist teachers with this assessment process, the department will work with schools and groups of schools to further support consistency of teacher judgement, so that learners and their parents can be confident of their achievement within the relevant curriculum.

Targets and standards constitute the starting point for re-focusing the missions of schools... so that meeting the standards comes first in everything schools do. High expectations needed to be reflected in explicit standards benchmarked against “best practice”.

Hill and Crevola (2001)

Attainment (at school) is only loosely related to age.

Dylan Wiliam (2011)
The strategy will also investigate the use of common norm-referenced tests that can be used at each school level to monitor progress. This annual data will be cross-referenced with NAPLAN, teachers’ assessments against the curriculum achievement standards and students’ own assessments of their progress, to provide a comprehensive view on which each learner’s next steps are planned. The Teaching for effective learning ‘learning design’ process will help teachers with this planning.

Other standards will also be designed to monitor the development of reading levels in the first years of schooling and progress indicators in numeracy and literacy development in preschools.

Progress indicators to monitor numeracy and literacy development in preschools and the development of reading levels in the first years of schooling will also be developed.

As well as having specific curriculum and achievement standards, it is vital for parents, communities, teachers, leaders and all who work with children and young people to have common high expectations for numeracy and literacy. We all want to be sure that our children and young people are positively challenged and are supported in reaching their full potential.

Consequently, the strategy will consult with parents, professionals and the community regarding the expectations we have for numeracy and literacy achievement in this State. These consultations will help to develop a clear and concise description of our shared expectations and will inform the work of all in raising achievement for our children and young people. This consultation process will be completed by August of 2013.

Through the Numeracy and Literacy Strategy, we will:

- set age-appropriate and year level achievement as our standard
- ensure that individual improvement targets are set for all learners, particularly those who are not achieving their age-appropriate or year level standard
- develop further measures that guide the expectations of teachers, including the use of ‘running records’
- promote the use of common and annual ‘norm’ referenced tests as a means of monitoring achievement and planning for learning
- develop a means for monitoring and reporting on numeracy and literacy development in preschools
- develop common transition processes to ensure that achievement information is passed on and used by teachers at major points of transition (preschool to school and Years 7 to 8) to support continuity of learning
- ensure that parents and students are kept informed of achievement against common standards.

Making public education the best education is the single most important thing that we can do together to build a bright and promising future for all of us... when we get public education right, we get the best workers and the best citizens... we can build a stronger economy, a stronger society, by strengthening the skills of our people.

Just as we need shared standards around learner achievement, we also need to ensure we have common expectations of teachers within schools. One of the keys to raising numeracy and literacy standards is for schools and preschools to develop their teaching practices collaboratively.

Research and experience has taught us that sustainable change and improvement are most likely to occur when all the members of an early years or school community share a vision and are committed to contribute in ways consistent with the shared vision. This ensures that expectations relating to improving learning outcomes are known and enacted in every home, learning space, classroom and curriculum area.

For the purpose of this strategy, schools and preschools will need to spend time clarifying expectations, purposes and practices for numeracy and literacy learning: ‘what’ we teach, ‘how’ we teach it and ‘when’ we teach numeracy and literacy in a systematic and integrated way.

A whole-school or preschool approach necessarily requires agreement about the following important matters:

**Purpose:** Reaching common understandings about the beliefs and values that underpin teaching and learning decisions – having a common language and shared understandings

**Practice:** Developing agreements about teaching, for example, using *Teaching for effective learning* ‘learning design’, incorporating higher-order thinking tasks in lessons, using peer learning and so on

**Policy:** Consistent implementation of agreed numeracy and literacy programs, eg, using a site-wide curriculum map or common screening and assessment tools

**People:** Building a collaborative culture through shared professional learning, team structures and performance development processes.

As we move towards greater local responsibility, preschool and school leaders will increasingly work with their communities to determine needs, set targets based on agreed standards and use resources to support improved learning outcomes.

At the same time, assuming responsibility for outcomes achieved and reporting to parents and families, while assuring the quality of our public education system, will require sites to:

- establish baseline data
- set attainment targets and actions
- monitor and report on the outcomes achieved.

An essential element in achieving improvement of student learning outcomes is the use of a teacher performance and development cycle. Evidence used to reflect on and evaluate teacher performance should come from multiple sources and include, as a minimum: data showing impact on student outcomes; information based on direct observation of teaching; and evidence of collaboration with colleagues.

*Australian Institute for Teaching and School Leadership* (2012)
The drivers for the strategy

Inspiring teachers and educators, challenging children and students to achieve their best

Teachers and educators play a pivotal role in providing a quality education for children and young people. Their work in helping students to develop and apply their understanding and emerging skills effectively cannot be underestimated. Effective teachers are crucial to children and students achieving highly and becoming powerful learners.

For teachers and educators to be effective, it is vitally important that the culture they work in supports and challenges them to use evidence-based teaching practices that make a positive difference to a child’s or student’s learning.

A report by the Gratten Institute and other studies that teachers are the most critical part of changing and improving existing learning practices as they are the direct point of connection with children and young people in both preschools and schools.

Teachers are committed to making a difference for children and young people and collectively they bring a wealth of knowledge and experience to the challenges of great start, strong foundations and powerful learners.

The lessons from the research shows that teachers are most effective in reviewing and innovating in their practices when they:

- work in learning teams with knowledgeable colleagues
- plan together, observe and provide feedback to each other
- share practices that work.

Commonly called ‘professional learning communities’, such teams of teachers collaborating and coaching each other are critical to meeting our challenges and gaining higher achievement.

In fact, the willingness of teachers to lead the work around powerful learning is one of the State’s greatest investments in the future of our economy and society.

The Numeracy and Literacy Strategy aims to support teachers in better understanding and responding to the complex and differing learning needs of students, as well as in challenging each learner to achieve their best.

The Teaching for effective learning, Early years learning framework and Reflect, Respect, Relate documents provide research-based approaches to expanding the range of teaching strategies teachers need to effectively meet the developmental needs of individual children and are strongly endorsed by the Numeracy and Literacy Strategy.

It is essential that our teaching workforce continues to become increasingly skilled and qualified to achieve the targets set for raising the numeracy and literacy levels of students.

As the Australian Curriculum is gradually implemented, new learning technologies continue to emerge and research informs us more deeply about how learning is best catered for, teachers and educators will be challenged to modify what they do in order to prepare learners for now and the future.

Powerful Learning cultivates curiosity and a love of learning. It relies on great teaching practices.

Gilbert and Macleod (2006)

We need to talk about quality teachers in terms of what they do and the effect they have on students. Too often our discussion on what constitutes quality in teachers emphasises the personal and professional attributes...

(inspiring teaching) requires teachers to enter the classroom with certain conceptions about progress, relationships and students. It requires them to believe that their role is that of a change agent – that all students can learn and progress, that achievement for all is changeable and not fixed, and that demonstrating to all students that they care about their learning is both powerful and effective.

John Hattie (2009)
Assisting us to further improve teacher quality is the Australian professional standards for teachers. This document:

- makes clear the knowledge, practice and professional engagement required across teachers’ careers
- informs the development of professional learning goals
- provides the framework by which teachers can judge the success of their own learning and assist self-reflection and self-assessment
- helps teachers to recognise their current and developing capabilities, professional aspirations and achievements.

Teachers also use the professional standards to inform accountability around numeracy and literacy.

This driver also highlights the need to address the entry qualifications in numeracy and literacy of teachers new to our workforce.

The Numeracy and Literacy Strategy supports a culture of shared responsibility between education providers and tertiary institutions for the future generation of high quality teachers and for promoting the benefits of having pre-service teachers actively engage with teachers and leaders in sites.

The learning/instruction achievement nexus which simultaneously builds capacity and addresses accountability is represented by the use of professional learning communities to embed Dylan Wiliam’s five key strategies of formative assessment.

Michael Fullan (2011)
The Numeracy and Literacy Strategy will contribute to the quality of teaching across South Australia by:

- reaffirming Teaching for effective learning as the required pedagogical framework for all schools and the Early years learning framework and Respect, Reflect, Relate in early childhood settings
- developing tools to help implement the most effective teaching practices in numeracy and literacy, including promoting the use of Teaching for effective learning ‘learning design’ at all year levels
- establishing guidelines and developing exemplars that support teachers to cater for learning differences and children who are struggling with foundational skills and powerful learning
- providing training for school or cluster-based numeracy and literacy coaches
- continuing to provide reading support teachers in the early years of schooling
- working with teacher professional associations and universities to develop and deliver professional learning to build on teachers’ capacity to teach, assess and monitor students’ numeracy and literacy achievement
- working with teacher professional associations and universities to identify and develop a range of numeracy and literacy resources for teachers
- using the Australian professional standards for teachers as a framework for reflecting on performance expectations
- providing coaching and mentoring in numeracy and literacy for newly appointed teachers
- supporting the Teacher Education Taskforce in reviewing and addressing teacher entry qualifications in relation to numeracy and literacy.

Active parents and families, collaborating in learning partnerships with early childhood settings and schools.

Children are born ready to learn and their parents or carers are their first teachers. Where families take a strong interest in a child’s or young person’s learning and provide a high level of support at home, good progress in early childhood settings or at school almost always follows.

Parents, carers and families can provide a supportive and stimulating home environment for learning by, for example:

- discussing and modelling learning strategies with children
- providing opportunities for children to ‘teach’ family members about concepts or key skills they have been learning
- making the home learning environment stimulating and supportive of learning
- encouraging children to build their decision making and problem solving skills
- giving opportunities for children to exercise responsibility for and autonomy in their learning.

Successful and sustainable improvement can never be done to or even for teachers. It can only ever be achieved by and with them.

Hargreaves and Fullan (2012)
Active parents, carers and families, collaborating in learning partnerships with early childhood settings and schools

Parents and carers have a positive impact when they have high expectations for their children to do their best to achieve their potential. They can support the curriculum by providing experiences in the home and community that extend on learning from early childhood settings and schools and offer the chance to apply what has been learned in a day-to-day situation.

To ensure that parents and carers are able to engage in their child’s curriculum learning, a two-way flow of information is vitally important. Opportunities to find out what their children are learning, how they are learning it and what kind of home support can help reinforce and consolidate the learning is vital. Where early childhood settings and schools develop diverse strategies to keep families fully informed about life at the site, learning partnerships are strengthened.

In the consultation, parents were very clear about wanting regular updates regarding the progress their children were making in their learning. This is the other key aspect of information flow between the early childhood setting or school and the family. Where children or young people are experiencing difficulties, parents and carers want to know what role they can play in assisting with intervention.

When learning in the home environment is aligned to learning in early childhood settings and schools, children and young people are positioned to better master foundational skills and develop the habits required for powerful learning.

As experts about their child, it is equally important that parents and carers have opportunities to feed relevant information back to the school about any needs – learning, social, emotional or physical – their child may have. Similarly, there may be issues requiring the support of the education setting that teachers and educators are not completely aware of. In such instances, learning partnerships can provide information that leads to better outcomes for children and young people.

Research suggests that when learning partnerships are strong, young people are more likely to complete education requirements, have lower rates of disengagement and a greater likelihood of commencing post-secondary education.

To strengthen learning partnerships between families, communities and early childhood settings and schools, the Numeracy and Literacy Strategy will:

- develop a communication strategy to promote the role of families and communities in child and student learning and assist early childhood settings and schools with further developing effective two-way communication with families.

This will include information, published in a variety of formats, regarding numeracy and literacy learning and ways that families can

The home is our first and highly influential learning environment, so building connections between home and the school is vital to learner success. This includes proactively involving families in their children’s schooling and extending personalised invitations to them to become involved.

Hanna Dumont et. al. OECD (2012)
help to reinforce and consolidate learning achieved in early childhood or school

- support early childhood settings and schools to provide parent and carer workshops about numeracy and literacy, with specific advice and follow-up guidance about how child and student learning can be supported at home

- assist early childhood settings and schools in more effectively engaging families from particular community groups who may not have been accessing quality information about numeracy and literacy learning

- regularly evaluate the level of parent satisfaction with communication channels and availability of information about numeracy and literacy learning for their children

- consult widely with parents, communities, children and young people to ensure the strategy is achieving its goals and that the needs of children and young people continue to be met.

The strategy aims for parents, teachers and community groups to commit to partnerships to improve achievement and address our challenges. Together there is a great chance of achieving these ambitions. To support this, the strategy will:

- undertake consultations with parents and carers and professionals to establish common expectations for numeracy and literacy. These consultations will commence straight away and will continue for the life of the strategy

- provide extensive information and resources to parents to support their children’s numeracy and literacy development

- provide information to all service providers who work with new mothers and families so that they are able to provide information and support to the families on numeracy and literacy development

- work with early childhood and other organisations to develop courses, workshops and resources for parents on numeracy and literacy.

Successful 21st century leaders, leading the learning

The role of school and preschool leaders and leadership teams is critical in supporting whole-site approaches to numeracy and literacy improvement.

The Numeracy and Literacy Strategy acknowledges the critical importance of leaders being engaged continually in leading, supporting and monitoring improvements in numeracy and literacy for all young people from birth to 18 years old.

The research of Robinson, Hattie, Wiliam and others tells us that successful 21st Century leaders engage, inspire commitment and maintain an unrelenting focus on the quality of teaching and learning. They believe every child can succeed in numeracy and literacy learning, given the appropriate level of support and challenge, regardless of personal circumstances. They know what quality teaching and learning looks like and strive to ensure it is happening across their schools and preschools. They work with their community to implement innovative strategies to address the range of needs and challenges experienced by children and young people. They value their role of connecting with other service providers and other leaders to ensure integrated and effective support to every child, young person and family.

Successful 21st Century leaders are very aware of the rapidly changing world

Parents have major effects in terms of the encouragement and expectations that they transmit to their children... Parents should be educated in the language of schooling, so that the home and school can share in the expectations and the child does not have to live in two worlds...It is not so much the structure of the family, but rather the beliefs and expectations of the adults in the home that contributes most to achievement.

John Hattie (2009)

There is a strong body of research to show that when parents, caregivers and the community are supportive of the work of schools and involved in its activities, students make progress.

Hill and Tyson (2009)
and knowledgeable about successful practices and current research.

They seek to lead educational change and innovation and incorporate new ideas to best prepare learners for a world of expanding information and technology. They take interest in the success of every child and young person and are committed to each being a powerful and successful learner.

High quality numeracy and literacy leadership is dependent on a number of factors, including leaders’ knowledge about effective teaching and learning practices in numeracy and literacy. Leading improvement in numeracy and literacy requires leaders to:

- strive to continually shape their own understanding of how effective numeracy and literacy skills are developed in children and young people
- develop their understanding of how assessment for learning can be used by teachers to plan students’ learning, to diagnose learning difficulties and to provide evidence of students’ learning
- acquire the necessary skills to enable them to lead evidence-based school self-evaluation and school improvement
- play an active role in developing and maintaining a professional learning community with their colleagues
- develop professional learning communities for their staff, that are focussed on building whole-school or preschool practices, enabling common planning and evaluation and built upon teachers coaching each other through regular peer observation and feedback
- establish processes for children and young people to evaluate and manage their own learning as well as providing feedback to teachers on their practice
- evaluate the professional learning needs of their staff and provide appropriate

The more leaders focus their relationships, their work and their learning on the core business of teaching and learning, the greater their influence on student outcomes.

Viviane Robinson (2007)

If we want students to become powerful learners, leaders have to work at creating a community that thrives on enquiry.

Guy Claxton (2009)
coaching and professional development in numeracy and literacy.

Effective site leaders analyse data regularly from teacher, state and national assessments to track the achievement and progress of all individuals and identified groups over time. This, in turn, enables site and system leaders to establish and continuously improve achievement at each year level. It provides staff with clear information about the effectiveness of the strategies underway and helps to make decisions about where best to direct the available resources.

Further, effective leaders use assessment information, including that about numeracy and literacy, to inform their school self-evaluation, reflective practices and their site improvement plans. They use the data to identify priorities for their staff development, including changes they may wish to make to teaching approaches and to assist with acquisition of resources.

A key aspect of leadership is to develop a culture that enables staff to:

- look critically at the site’s numeracy and literacy outcomes
- identify how improvements can be made
- implement actions informed by current research
- monitor learner outcomes effectively.

It is essential that leaders actively involve and engage their school community in these processes of school improvement.

Successful 21st Century leaders promote pedagogies that lead to powerful learning. Professor Guy Claxton suggests that for students to become powerful learners, leaders need to create communities that thrive on inquiry. Professional learning is pivotal.

To support leaders in leading numeracy and literacy, the strategy will:

- work with professional associations and others to develop a numeracy professional learning program for leaders building their understanding and ability to lead whole-site improvement and achieve our three challenges
- provide guidelines and expectations regarding whole-site numeracy and literacy approaches
- create evidence-based resources for leaders to support numeracy and literacy improvement
- promote the use of the Teaching for effective learning, ‘learning design’, Early years learning framework and DECD Improvement and accountability framework to support improvement in numeracy and literacy
- support leaders in using and managing data effectively to guide teaching practices with a focus on assessment for learning to improve the numeracy and literacy outcomes of all learners
- implement more focused accountability measures to drive and monitor numeracy and literacy improvement.

It is school leaders who promote challenging goals and then establish safe environments for teachers to critique, question and support other teachers to reach these goals together that have most effect on student outcomes. School leaders who focus on students’ achievement and instructional strategies are the most effective.

John Hattie (2009)

... it is a leader’s role as capacity builder that is fundamental to learning in a complex, changing world.

Stoll, Bolam and Collarbone (2004)
Numeracy + Literacy Actions

Great Start

Strong Foundations

Powerful Learners
A great start

To provide a great start for children with their numeracy and literacy the Numeracy and Literacy Strategy will:

- promote the monitoring of every child’s development through the use of the ‘Blue Book’ as a common source of information for families and health and education professionals as well as establishing ways of monitoring children’s early numeracy and literacy development
- promote family participation in child health checks – particularly the 18-24 month health check – and include advice about numeracy and literacy development
- provide information and support to service providers to ensure they are able to assist families with advice on children’s numeracy and literacy development
- increase the number of supported playgroups in preschools and schools so that more families have access to regular, play-based early learning activities which include a focus on numeracy and literacy development
- develop online and other resources for parents on numeracy and literacy
- develop courses and workshops for parents to support their children’s numeracy and literacy development.
Strong foundations

To develop strong foundational skills the Numeracy and Literacy Strategy sets a benchmark for all children and young people to be achieving at their age and year level appropriate standard. This will require:

• every preschool and school to develop annual numeracy and literacy targets that aim to gain growth in achievement and develop powerful learners
• implementing progress indicators to track numeracy and literacy development for preschool children. This will support educators in planning numeracy and literacy learning and working with and reporting to parents
• implementing a ‘one plan’ approach to identify support and intervention for children or young people who have not achieved their year or age level. These plans will focus on specific next learning steps for each student sing the Early years learning framework, the Australian Curriculum Achievement Standards, and the Numeracy and Literacy Continuums to regularly assess and report on progress against their year level standard
• committing to assessing every child and young person’s achievement progress using recommended annual norm-referenced tests and other benchmarks including instructional reading levels. This information will be reported to parents
• supporting schools and groups of schools to use audit processes to develop consistency of teacher judgement against achievement standards.

Powerful learners

To ensure that children and young people are developing their capacities as powerful learners, the Numeracy and Literacy Strategy will:

• call on the expertise and energy of our teachers and support them in developing practices for all children and young people to be powerful and successful in their learning
• host a powerful learning summit that brings together teachers and leaders from SA with experts in the field of powerful learning. This summit will clarify the powerful learning future we want for our children and young people and what strategies we will employ in both numeracy and literacy to ensure they are powerful in their learning.
• develop support materials, workshops and courses for teachers on developing powerful learners
• use Respect Reflect Relate and Teaching for effective learning and the Early years learning framework to enable teachers to reflect on their practices and adapt them to ensure higher achievement for children and young people
• report to parents on their children’s development as powerful learners including their confidence, capacity to solve problems, think creatively, and deal with new knowledge in numeracy and literacy
• describe the graduate qualities that all who finish secondary school will possess
• involve children and young people more in providing feedback about their learning to their teachers and evaluating and making decisions about their own learning.
To ensure that we act with common expectations and standards the Numeracy and Literacy Strategy will:

- set age and year level achievement as our standard
- promote the use of common and annual norm-referenced tests and other benchmarks including instructional reading levels as a means of monitoring achievement and planning for learning
- develop further standards that guide the expectations of teachers such as the use of running records for all children
- develop means for monitoring and reporting on numeracy and literacy development in preschools
- develop common transition processes to ensure that achievement information is passed on and used by teachers at major points of transition (preschool to school and Years 7 to 8)
- ensure that individual targets are set for all learners particularly those who are not achieving their age or year level standard
- ensure that parents and students are kept informed of achievement against common standards.

Common high expectations and standards
Teachers

This Numeracy and Literacy Strategy will support teachers across South Australia by:

• setting Teaching for effective learning as the required pedagogical framework for all schools and the Early years learning framework and Respect, Reflect, Relate in all early childhood settings
• developing tools to help implement the most effective teaching practices in numeracy and literacy, including recommending the use of ‘learning design’ at all year levels
• establishing guidelines and developing exemplars that support teachers to cater for learning differences and children who are struggling with foundational skills and powerful learning
• providing training for school or cluster-based numeracy and literacy
• continuing to provide reading support teachers in the early years of schooling
• working with teacher professional associations and universities to develop and deliver professional learning to build on teacher’s capacity to teach, assess and monitor students’ numeracy and literacy achievement.
• working with teacher professional associations and universities to identify and develop a range of numeracy and literacy resources for teachers
• using the Australian professional standards for teachers as a framework for reflecting on performance expectations
• providing coaching and mentoring in numeracy and literacy for newly appointed teachers
• supporting the Teacher Education Taskforce in reviewing and addressing teacher entry qualifications in relation to numeracy and literacy.

Parents and families

To strengthen learning partnerships between families, communities and early childhood settings and schools, the Numeracy and Literacy Strategy will:

• develop a communication strategy to promote the role of parents and families in child and student learning. This will include information, published in a variety of formats, regarding numeracy and literacy learning and ways that families can help to reinforce and consolidate learning achieved in early childhood or school
assist early childhood settings and schools with further developing effective two-way communication strategies with families

supporting early childhood settings and schools to provide parent and carer workshops about numeracy and literacy, with specific advice and follow up guidance about how child and student learning can be supported at home

assisting early childhood settings and schools in more effectively engaging families from particular community groups who may not have been accessing quality information about numeracy and literacy learning

regularly evaluate the level of parent satisfaction with communication channels and availability of information about numeracy and literacy learning for their children.

The strategy aims for parents, teachers and community groups to commit to partnerships to improve achievement and address our challenges. Together there is a great chance of achieving these ambitions!

To support this, the strategy will:

consult widely with parents, communities and professionals to establish common expectations for numeracy and literacy. These consultations will commence straight away and will continue for the life of the strategy

provide extensive information and resources to parents to support their children's numeracy and literacy development

provide information to all service providers who work with new mothers and families so that they are able to provide information and support to the families on numeracy and literacy development

work with early childhood and other organisations to develop courses, workshops and resources for parents on numeracy and literacy.

Successful 21st century leaders

The Numeracy and Literacy Strategy will support educational leaders across South Australia by:

building their understanding and ability to lead whole-site improvement and achieve our three challenges

providing guidelines and expectations regarding whole-site numeracy and literacy approaches

creating evidence-based resources for leaders to support numeracy and literacy improvement

promoting the use of the Teaching for effective learning, ‘learning design’, Early years learning framework, DECD Improvement and accountability framework and the Australian Curriculum to support improvement in numeracy and literacy.

supporting leaders in using and managing data effectively to guide teaching practices with a focus on assessment for learning to improve the numeracy and literacy outcomes of all learners

implementing more focused accountability measures to drive and monitor numeracy and literacy improvement.
Summary

Working closely together, parents, communities, teachers and leaders can make a significant difference for children and young people and their numeracy and literacy achievement.

Our critical agenda in South Australia is to ensure all children and young people have a great start, develop strong numeracy and literacy foundations and are powerful learners. With common high expectations, shared standards and commitment to developing numeracy and literacy skills from birth, the community can fulfil its obligation to its children and young people and enable them to be successful in learning, life and work.

This strategy provides information and assistance to parents so they can support their children in learning. It expects all schools and preschools to set ambitious growth targets for numeracy and literacy learning and to monitor each child’s progress. It aims to prepare children for their learning now and in the future by enabling them to develop their problem solving capabilities and the capacity to think deeply, creatively and confidently – enabling them to be powerful learners.

Nelson Mandela once said: “There can be no keener revelation of a society’s soul than the way it treats its children”. This strategy, in aiming for all children and young people to be successful and achieve highly in numeracy and literacy, reveals much about South Australia’s soul; through the shared endeavour of parents community, teachers and leaders we intend to give Every chance for every child.

How we gathered community views

Have your Say: an invitation to all South Australians to comment on key aspects of the proposed numeracy and literacy strategy (November 2012)

Further consultation with community organisations and teacher and leader professional associations (February 2013)

Parent focus groups (March 2013)

Future consultation

Representation of parents and children and young people on the strategy reference groups

Further consultation throughout the life of the strategy

Strategy champions: a group of well-known South Australians who are passionate about numeracy and literacy achievement for children and young people and who monitor the progress of the strategy
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