DECD ENVIRONMENTAL SCAN SOCIAL + TECHNOLOGICAL + ECONOMIC + ENVIRONMENTAL + POLITICAL



EXECUTIVE SUMMARY

THIS DOCUMENT PROVIDES A SUMMARY ASSESSMENT OF TRENDS AND ISSUES **EXPECTED TO IMPACT** ON THE BUSINESS OF THE DEPARTMENT OVER THE NEXT FIVE YEARS. IT PROVIDES A FOUNDATION FOR **FURTHER DISCUSSION** AND REFLECTION ON THE OPPORTUNITIES AND CHALLENGES THAT WILL INFLUENCE DECD'S STRATEGIC PLANNING.

A number of trends and issues are presented under five broad categories:

SOCIAL

- » South Australia's population will become older, but there will continue to be growth in the numbers of children requiring education and care services.
- Increasing numbers of children being diagnosed with Autism and implementation of the National Disability Insurance Scheme will have implications for education and care settings.
- » Societal responses to risk are an emerging issue with implications for the developmental opportunities available to South Australian children.

TECHNOLOGICAL

- » An expansion in online learning platforms will challenge the role of schools as the formal setting for the transfer of knowledge and skills.
- » Existing and emerging technologies will open up opportunities to change the way DECD delivers services.

ECONOMIC

- » Political decisions on reform to Australia's federation and tax system have the potential to influence state revenues.
- » Transitions in the labour market as South Australia's manufacturing base continues to decline may see increases to unemployment and associated disadvantage.
- » As more of the workforce approaches retirement age, alternative models for transitioning to retirement and work roles may be considered in response to the loss of skills and experience.

ENVIRONMENTAL

- » Changes to South Australia's climate as a result of global warming will impact on the development and maintenance of DECD's infrastructure.
- » Education and care settings will continue to play a key role in supporting the developmental and educational needs of a generation for whom the impact of climate change will be a major challenge.

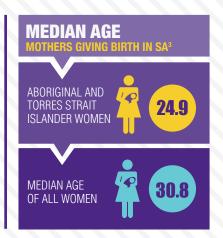
POLITICAL

- » State and federal government elections will influence the structure and delivery of education and care services.
- » New models for the delivery of services to vulnerable children and families will be explored by governments seeking to achieve better outcomes

SOCIAL







DEMOGRAPHIC CHANGES

While South Australia's population is getting older, it is also growing. The projected resident population in 2021 is expected to increase by some 190 000 people from the 2011 population.⁴

The biggest growth in the numbers of children is expected to occur in the outer suburban local government areas of Playford and Onkaparinga. To cater for growing numbers, DECD may need to plan for upgrades to existing schools or building of new schools. In an environment of budgetary constraint, an increased use of public/private partnerships for building and maintenance of schools is anticipated.

Population projections do not forecast significant increases in inner city areas and for many areas there will be decreases in the resident population of school-age children. The South Australian Government's support for urban infill and policy on urban boundaries for metropolitan Adelaide, as well as local government planning provisions will be factors that influence where growth can occur. This may result in increased pressure on established schools.

As the lead government agency responsible for child development, there is a role for DECD in advocating to ensure planning for high and medium density urban infill encompasses the needs of children as community members, including the incorporation of spaces for children to play safely.

The fertility rate for Aboriginal women continues to be higher than that of the general population at 2.34 children per woman in comparison to 1.88 for non-Aboriginal women.⁵

As Aboriginal communities continue to have poorer outcomes across a range of social indicators, this will remain a priority target group for DECD.

June 2013 SA Median Age 39.8 Australian Bureau of Statistics, Catalogue No.3235.0 - Population by Age and Sex, Regions of Australia, 2013.
 June 2031 projected between 41.1 and 42.6 Australian Bureau of Statistics, Catalogue No.3222.0 - Population Projections, Australia, 2012 [base] to 2101.

^{2. 34 958 –} growth in the number of children aged 0-14 in South Australia projected to occur between 2011 and 2021 SA Local government area projections 2006 to 2026, Government of South Australia 2011.

^{3.} The median age of Aboriginal and Torres Strait Islander women who registered a birth in 2013 was 24.9 years, almost six years lower than the median age of all mothers (30.8 years). Australian Bureau of Statistics, Catalogue No. 3301.0 - Births, Australia, 2013.

^{4.} SA Local government area projections 2006 to 2026, Government of South Australia 2011.

^{5.} Australian Bureau of Statistics, Catalogue No. 3301.0 - Births, Australia, 2013).

SOCIAL

OUT-OF-HOME CARE⁶ number of children entering out-of-home care in 2013-14 **Aboriginal children and young Number of** people as a proportion of all children in outof-home care in South Australian children in number of children **South Australia** out-of-home care who left out-of-home in 2013-14 care in 2013-14

OUT-OF-HOME CARE

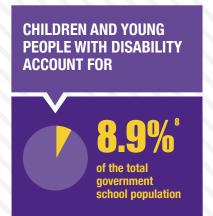
While the number of registered foster carers in South Australia has remained stable. recruitment efforts have been unable to keep pace with the growth in numbers of children being placed in out-of-home care over time. Combined with the increased length of time that children are remaining in out-of-home care, and the differing and sometimes complex needs of these children, there may be a need to consider alternative models of out-of-home care provision.

One emerging issue is the move towards professional foster care models in recognition of the high level of skills required for carers to support children with complex needs. This kind of model is currently being implemented through higher payments to foster parents in specialist programs.

Further movement towards payment of a wage to professional carers is impacted by Australian Government taxation and industrial relations requirements and will require cooperation at a national level to resolve.

Another model that has been developed in other states and territories is secure therapeutic residential care. Therapeutic secure care is a placement option for those children and young people in out-of-home care who require intensive care and support to protect them from extreme risk-taking or life-threatening behaviour that can only be effectively provided in a secure setting.







DISABILITY

Children and young people with disability account for 8.9% of the total government school population. Within this cohort, 80% attend mainstream schools, 14% attend a special class or disability unit located on a mainstream site, and 6% attend a special school.

There has been no overall increase in the percentage of students with disability since 2009, but there has been an increase in the number of students with Autism.

The 2012 Australian Bureau of Statistics Survey of Disability Aging and Carers showed an estimated 115 400 Australians (0.5%) had Autism. This was a 79% increase on the 64 400 people estimated to have the condition in 2009. Males were four times more likely than females to have Autism.

While this may reflect changes in the ability to recognise and diagnose Autism rather than an actual increase in prevalence, it may still place pressure on DECD to respond to the needs of children with Autism coming into contact with education and care services. The community, with government support, is seeking to respond to this trend by establishing a specialist school for children with Autism, in addition to those

programs already available in government schools. With an increasing number of children diagnosed with Autism, staff may need to be equipped with the knowledge and skills to respond to the education and care needs of these children

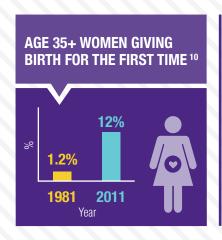
Although the National Disability Insurance Scheme (NDIS) is only just starting to reach school-aged children, families have begun to request therapies purchased with their NDIS package be provided at school. Some schools have reported experiencing difficulty coordinating the influx of external providers. Several schools, including special education units, are restricting the delivery of NDIS-funded supports to after school hours due to the impact of multiple external service providers going into schools and providing services that do not relate to the curriculum.

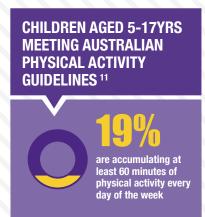
^{7. 79% -} increase in the number of Australian's with autism between 2009 and 2012 Australian Bureau of Statistics, Catalogue No. 4430.0 - Disability, Ageing and Carers, Australia: Summary of Findings, 2012.

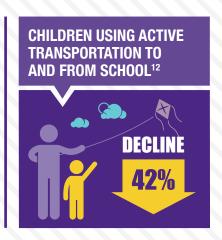
^{8.} DECD Census data and DECD Annual Report 2014.

^{9.} Australian Bureau of Statistics, Catalogue No. 3301.0 - Births, Australia, 2009. Australian Bureau of Statistics, Catalogue No. 3301.0 - Births, Australia, 2013.

SOCIAL







PARENTING AND RISK

Having fewer children later, and increased exposure to information may be leading to increased pressure on parents to be 'perfect'.

Increased exposure to information may also be a factor in driving community perceptions that crime is increasing, despite the incidence of most crimes having been on a downward trend

Greater access to information increases people's awareness of risk and prompts individuals and organisations to put in place measures that minimise risks. Combined with the potential for litigation, Australians are living in an increasingly risk-averse culture.

One of the potential consequences of these factors is a perceived increase in the prevalence of overprotective parenting behaviours, commonly reported in the media as 'helicopter parenting'.

While there is limited research in this area, some existing studies have highlighted a connection between overprotective parenting and increased anxiety among children. There are concerns that excessive risk aversion is limiting the opportunities for children to engage in activities that enable them to take ageappropriate risks and develop competence and autonomy.

For DECD this presents challenges in supporting children to develop the skills and capabilities identified as important for future participation in society.

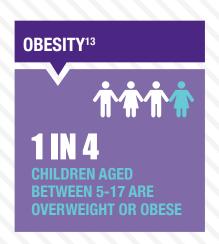
A related issue is the levels of physical activity amongst children and young people. Children and young people are now far less likely to ride or walk to school than previous generations and children are showing increased preferences for sedentary play activities.

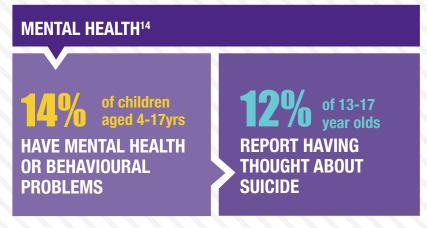
There are a number of trends that could be contributing to the reduction in active forms of transportation to school and fewer opportunities for unstructured outdoor play. Heightened perceptions of crime or concerns for children's safety in navigating busy roadways may shape the decision-making of caregivers. Changes in labour market participation that have resulted in increasing numbers of families where both parents are working, as well as increased numbers of single parent families, may also place constraints on the ability of families to support outdoor activities.

^{10.} Women giving birth for the first time at 35 or over has gone from 1.2% of births in 1981 to 12.0% in 2011. The mean age has increased from 24.4 years to 27.9 years. Scheil W, Scott J, Catcheside B, Sage L, Kennare R. Pregnancy Outcome in South Australia 2011. Adelaide: Pregnancy Outcome Unit, SA Health, Government of South Australia, 2013.

^{11 19% -} number of children aged 5-17 years that meet the recommended Australian physical activity guidelines of accumulating at least 60 minutes of moderate to vigorous intensity physical activity every day of the week. Australian Health Survey: Physical Activity, 2011–12. Australian Bureau of Statistics, Catalogue No. 4364 0. Capherra, 2013

 ^{42% -} decline in the number of children using active transportation to and from school from 1971 to 2013. Active Healthy Kids Australia (2014). Is Sport Enough? The 2014 Active Healthy Kids Australia Report Card on Physical Activity for Children and Young People. Adelaide, South Australia: Active Healthy Kids Australia.





Distance is one of the key determinants of whether children will use active or passive transport to travel to a destination¹⁵. The establishment of 'super schools' and the trend for parents to choose a school other than their local school means that children are more likely to be travelling further to school and school is less likely to be walking distance from a student's home.

According to parents, 35% and 39% of primary school students, aged 6-7 and 11-12 years respectively, travel to and/or from school using active transport at least once per week ¹⁶

The number of children participating in organised sport has not increased significantly, rising from 62% in 2003 to 63% in 2009¹⁶, however, there has been a change in preferences of children towards sedentary play activities, and the incidence of children who are overweight or obese remains high at one in four children aged 5 – 17.

The impact of these issues could result in more children coming into contact with departmental services who are experiencing anxiety or have not had the same developmental opportunities as their peers and therefore require additional management or support in classroom settings.

Departmental staff involved in the environmental scan interviews perceived an increase in the severity of behaviour for younger children including suicidal ideation for pre-teens.

Where children in early childhood settings and schools exhibit challenging behaviours, staff need to be equipped with the skills to not only support the children but to work effectively with parents to set appropriate boundaries around their behaviour.

The department may need to explore opportunities to enhance existing approaches to early intervention through education and support, as well as specific programs that could provide children with opportunities for risk taking that they may not otherwise receive.

The Government has already put in place strategies to support and encourage physical activity in education and care settings and initiatives may also be occurring at individual schools and preschools. Considering the benefits of unstructured play on children's development and learning,

^{13.} Australian Bureau of Statistics, Catalogue No. 4364.0.55.003 - Australian Health Survey: Updated Results, 2011-2012.

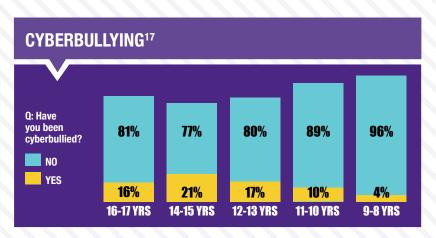
^{14. 14%} of Australian children and adolescents aged 4-17 have mental health or behavioural problems. 12% of 13-17 year olds reported having thought about suicide, while 4.2% had actually made a suicide attempt. There is a higher prevalence of child and adolescent mental health problems among those living in low-income, step/blended and sole-parent families. Sawyer, M. G., Arney, F. M., Baghurst, P. A., Clark, J. J., Graetz, B. W., Kosky, R. J., Nurcombe, B., Patton, G. C., Prior, M. R., Raphael, B., Rey, J., Whaites, L. C., & Zubrick, S. R. (2000). Child and adolescent component of the National survey of Mental Health and Well-being. Canberra, ACT: Mental Health and Special Programs Branch of the Commonwealth Department of Health and Aged Care.

^{15.} Active Healthy Kids Australia (2014). Is Sport Enough? The 2014 Active Healthy Kids Australia Report Card on Physical Activity for Children and Young People. Adelaide, South Australia: Active Healthy Kids Australia.

^{16.} Australian Institute of Family Studies. Growing Up in Australia, Longitudinal Study of Australian Children (LSAC) 2011: Melbourne.

SOCIAL





DECD may wish to consider additional opportunities to encourage physical activity in the context of the care and education services it delivers.

One of the challenges for the department is in addressing the concerns of schools in relation to managing risk in outdoor learning areas. There are some initiatives in other countries that seek to counter the trend towards removal of risk in outdoor play, such as the establishment of 'risk playgrounds' where children are encouraged to explore risk as part of play in a supervised context.

SOCIAL MEDIA

The increasing use of mobile devices and wi-fi hotspots makes access to social media easy and instant. This accessibility is affording children and young people with unprecedented access to the wider world and for a variety of activities and functions including entertainment, social networking and academic purposes. The use of mobile devices and activities has been embraced by younger generations guickly and incorporated seamlessly into their daily lives.

Despite Australian Health
Department guidelines
recommending children over
two years spend fewer than
two hours looking at screens
daily, a recent study from the
University of Western Australia
found that 45% of eight-yearolds were already exceeding the
limit; this climbed to 80% for
children aged between 15 and
16. This is particularly true for
15-year-old girls who are seven
times more likely to exceed the
recommendation than boys.

The research suggests that the two-hour screen time may need to be reviewed and that it may, in fact, be impossible to limit screen time.

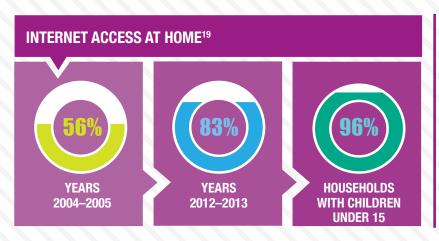
Access to social media and the amount of time spent on social media is driving new thinking about online behaviour and safety. The Australian Government recently passed the Enhancing Online Safety for Children Bill 2014 and appointed its first e-safety commissioner in response to an Australian Media and Communications Centre study published in 2013, which showed that approximately one in five Australian children aged between eight and 17 were affected by cyber bullying each year.

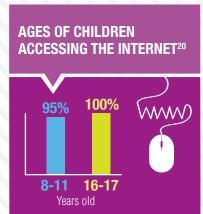
DECD may need to consider curricula to support safe online behavior and etiquette, and to consider new policy positions for effectively responding to cyber bullying. 18

^{17.} Study by the Australian Communications and Media Authority released in October 2013

^{18.} Virtually Impossible: Limiting Australian children and adolescents daily screen-based media use'. University of Western Australia.

TECHNOLOGICAL





THE INTRODUCTION
OF NEW FORMS OF
TECHNOLOGY INTO
MAINSTREAM USE
IS INCREASINGLY
BECOMING INTEGRATED
INTO CLASSROOM
PRACTICE. EXISTING
AND EMERGING
TECHNOLOGIES WILL
ALSO FORCE EDUCATION
SYSTEMS TO CONSIDER
WHAT ROLES THEY WILL
PLAY IN SOCIETY INTO
THE FUTURE.

The way in which schools have approached emerging technologies to date has been to view them as additional tools that can be applied in education settings to complement existing teaching practices. A number of emerging technologies could be applied in this way. However, the trend towards online learning in particular, has the potential to disrupt existing teaching practice and the role of schools into the future.

INTERNET ACCESS AND MOBILITY

Research by the Australian Media and Communications Centre has found that by the age of 17, the use of the internet is fully integrated in the everyday lives of young Australians. ACMA suggests that the activities that teenagers undertake online may be preparing them to fully engage in the digital economy in their future working and recreational lives.

Online access is becoming increasingly more mobile as affordability and flexibility in mobile plans increases, and network upgrades increase internet speeds. By the end of 2012, approximately 20% of Australian homes had disconnected their fixed-line home phone in favour of mobile options. One factor that is increasing access and activities is the convenience of mobile applications that allow users to quickly and easily view, stream, contribute and update content, and increasing sophistication

in applications which allow users to access multiple communication and media services from a single device.

As DECD plans for its future ICT capacities, consideration needs to be given to the growing mobility and accessibility of digital technologies.

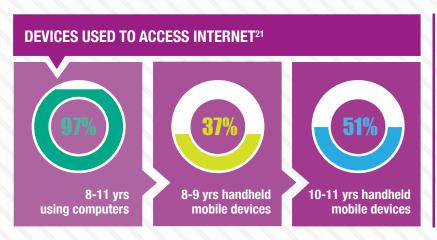
ONLINE LEARNING

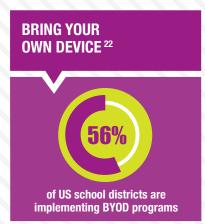
The rise of online learning platforms challenges the traditional role of schools as the setting for the formal transfer of knowledge and skills. Large scale online learning resources mean that opportunities for delivery of a set curriculum are no longer limited to a particular setting and over a particular time. This presents a challenge to more traditional approaches to teaching and learning, but beyond this there are significant opportunities for engaging children and young people in learning and improving academic outcomes.

^{19. 2004–05, 56%} have access to the internet at home. In 2012–13, 83% of persons were internet users. Figure jumps to 96% for households with children under 15 years of age. Australian Bureau of Statistics, Catalogue No. 8146.0 - Household Use of Information Technology, Australia, 2012-13.

^{20.} The vast majority of 8 to 17 year-olds surveyed had accessed the internet in the last four weeks, from 95% of the 8-11 year olds to 100% of the 16-17 year olds. Like, post, share: Young Australians' experience of social media, Australian Communications and Media Authority, 2013.

TECHNOLOGICAL





These kinds of programs present many opportunities for improving student learning and for teaching practice. They introduce greater flexibility to support students to learn at their own pace and for teachers to monitor individual progress. They also extend access for students to engaging and dynamic presentation of content, with teachers then integrating this content into learning activities.

There are opportunities to use online learning programs to improve access for students with disabilities, and to minimise disruption for students experiencing prolonged illness, or periods away with parents for travel or work without interruption to schooling. The department may also consider opportunities for provision of services to children in remote areas.

The flexibility offered by online learning could be used in locations where DECD experiences difficulty recruiting staff with specialist content knowledge, such as maths and

science. Existing specialist teachers could be assigned across a number of school sites to provide online or face-to-face support alongside the completion of personalised online content by students. Experts in particular fields could be engaged as online mentors working in partnership with teachers to support student learning.

Another issue may be the growing commercial interest in developing educational software. A challenge for DECD would be to ensure that the integrity of curriculum is not compromised through the use of commercially developed online programs. In the Australian Bureau of Statistics analysis of a systemwide approach, schools and preschools will need to be aware of the implications of using commercially developed online educational products in relation to consent and privacy.

With the rise in online platforms for delivery of content, the 'flipped classroom' is becoming a popular teaching model, where students are

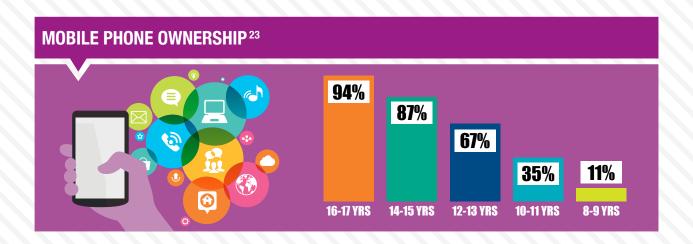
first exposed to new material outside of class and class time is used for activities that support students to assimilate knowledge. Aside from the practical challenges of ensuring reliable access to the internet and sufficient broadband speeds for all sites, the challenge for DECD concerns the uneven development of these kinds of practices within schools, and supporting leaders to lead change in an area where they may not have a high level of knowledge or skill. Consideration may need to be given to the professional development requirements of teachers, and within this, the opportunities to utilise online learning platforms as part of this professional development.

BRING YOUR OWN DEVICE

With the growing use of personal computers, laptops and tablets for study both in and outside of the classroom, students in South Australian schools, as well as internationally, are being

^{21.} Almost all children in 8 to 11 year age group have done so via a computer [97%], with the next most commonly used platform being a handheld mobile device (eg iPad, iPod Touch, Nintendo DS, PSP). Access by this type of mobile device was reported by 37% of 8-9 year olds and 51% of 10-11 year olds. Like, post, share: Young Australians' experience of social media, Australian Communications and Media Authority, 2013.

^{22. 56%} of US school districts are implementing BYOD programs. Johnson, L., Adams Becker, S., Estrada, V., and Freeman, A. (2014). NMC Horizon Report: 2014 K-12 Edition. Austin. Texas: The New Media Consortium.



asked to bring their own device. This is viewed as being driven largely by funding pressures that do not enable education systems to deliver personal technology for all students.

The challenge for DECD may be in addressing equity issues for children from families where children may not have access to their own mobile devices. The department may wish to provide guidance or direction to schools on the models for BYOD suggested to ensure equity for students at each site.

CLOUD COMPUTING

A global trend is developing for organisations to move away from owning and operating information and communication technology assets to more cost-effective cloud computing models. Cloud computing is a way of storing and accessing data over the internet instead of a computer hard drive.

A shift to cloud-based computing has potential to remove costs associated with maintenance of servers. There are challenges for

government in ensuring security and compliance with privacy requirements. In South Australia, exploration of cloud computing for government ICT services is being undertaken through the Office for Digital Government, Department of the Premier and Cabinet.

TEACHING THE SKILLS REQUIRED FOR THE FUTURE

A political and media focus on literacy and numeracy is expected to continue. The establishment of NAPLAN places an increased focus on literacy and numeracy by measuring performance and allowing comparisons. While this can be a useful tool for improving performance both in the classroom and at a system level, it diverts attention from those aspects of the curriculum that are not so easily measured.

Schools are focused on providing not only literacy and numeracy skills but also developing critical thinking and problem solving skills and

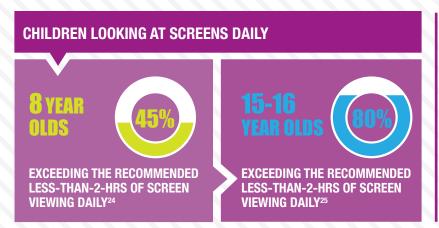
life-long learning strategies. This broad focus is reflected in the general capabilities of the Australian Curriculum.

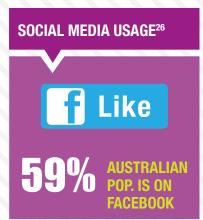
When considering the skills required in a globalised world, these capabilities are consistent with the increasing focus for employers on behavioural competencies.

Opportunities offered by current and emerging technologies for personalised learning need to be considered alongside the experiences of children growing up in an increasingly fragmented society that values individualism and private choices with fewer shared assumptions and values. Schools and early childhood settings will continue to have a role in the socialisation of children. In response to the changing use of technology and broader societal trends. DECD may wish to consider the benefit in promoting communal learning activities that support the development of values that will support children's engagement in a globalised world.

^{23.} Mobile phone ownership increased significantly with age: 11 per cent of 8-9 year olds have their own mobile phone, 35 per cent of 10-11 year olds, 67 per cent of 12-13 year olds, 87 per cent of 14-15 year olds and 94 per cent of 16-17 year olds have a mobile phone. Mobile phone internet access also increased with age, with around half the 14-17 year olds using this platform (49 per cent of 14-15 year olds and 54 per cent of 16-17 year olds). Like, post, share: Young Australians' experience of social media, Australian Communications and Media Authority, 2013.

TECHNOLOGICAL





HARNESSING EXISTING TECHNOLOGY IN SERVICE DELIVERY

Australians are increasingly moving online to connect, to deliver and access services, to obtain information and to perform transactions such as shopping and working²⁷.

There is an opportunity for the department to respond to community expectations by providing for online delivery of services such as payment of school fees. The information and communication technology systems currently used in the department are unable to support features that are commonplace in most other organisations, including government agencies.

Into the future DECD's ICT infrastructure will also need to become more automated and take account of increased demand for data to provide evidence for decision-making. Planning for updating already outdated systems may need to take into consideration future needs, and not just meet current community expectations.

Increased connectivity through social media and accessibility to 'smart' devices presents existing opportunities for maintaining connections between children in care and family members and friends, especially in situations where out-of-home care placements result in children and young people being removed from their local communities and face-to-face contact arrangements become more time and resource intensive.

THE DEPARTMENT **COULD CONSIDER OPPORTUNITIES TO USE SOCIAL MEDIA** TO COMMUNICATE **MESSAGES RELATING TO** CHILD DEVELOPMENT. **MESSAGES COULD BE TARGETED DIRECTLY TO PARENTS EITHER THROUGH A DEPARTMENTAL SOCIAL** MEDIA ACCOUNT OR THROUGH USING **COMMERCIAL OPTIONS AVAILABLE ON SOCIAL** MEDIA SITES.

^{24.} Despite Australian Health Department guidelines recommending children over two years spend fewer than two hours looking at screens daily, the study found 45 per cent of eight-year-olds were already exceeding the limit, and the proportion climbed to 80 per cent for children aged between 15 and 16.

^{25.} By 15 years of age, girls were over 15 times more likely to exceed the less-than-two-hours recommendation compared to their eight-year-old peers, and almost seven times more so than boys," he said

^{26.} Facebook – 13.5m users. Australian Bureau of Statistics Current Australian population is 23.5m. Therefore, 59% of the population is on Facebook. Social Media Statistics Australia – February 2015.

^{27.} Hajkowicz SA, Cook H, Littleby A. 2012. Our Future World: Global megatrends that will change the way we live. The 2012 Revision. CSIRO, Australia.

ECONOMIC



THE 2015 INTERGENERATIONAL **REPORT PROVIDES** A BACKDROP TO THE **CONSIDERATION OF THE SOUTH AUSTRALIAN ECONOMY IN THE CONTEXT OF THE BROADER AUSTRALIAN ECONOMY. THE REPORT IDENTIFIES THE KEY FACT THAT CURRENTLY AUSTRALIA IS SPENDING** \$100M PER DAY MORE THAN IT IS EARNING, WITH THE SHORTFALL **BEING MADE UP IN BORROWINGS. THIS** IS A FUNDAMENTAL **CHALLENGE TO THE ECONOMIC POSITION OF** THE WHOLE COUNTRY.

STATE REVENUE

In 2013-14 South Australia received over half of total government revenue from the Australian Government. GST revenue grants accounted for 44.2% of South Australian Government Revenue.²⁹

The Australian Government's White Paper on the reform of Australia's tax system and White Paper on the Reform of the Federation will inform political decisions that have an impact on South Australia's revenue.

The National Commission of Audit proposed reforms to the federation that would see State government expenditure on education services matched with revenue raising capacity. In the context of the debate on tax reform and federation there will be opportunities to address some of the inequities in education funding that the 'Gonski reforms' attempted to remedy. The challenges will be in ensuring that South Australia's capacity to deliver services over the longer term is not compromised by a reduced

revenue raising capacity in comparison to other states and territories.

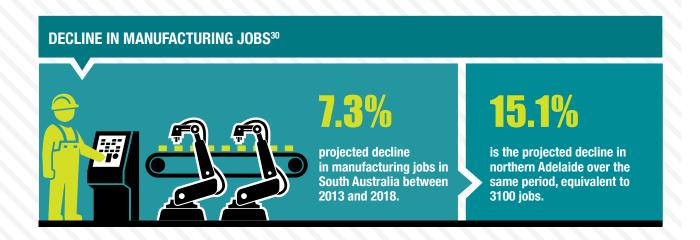
Separate to any political decisions, economic circumstances may result in decreased state revenues into the future. While the South Australian state budget forecasts modest growth in gross state product of around 2.25% over the forward estimates, South Australia will remain vulnerable to any deterioration in global economic circumstances.

In the face of funding pressures to achieve greater efficiencies, the challenge for DECD may be to provide a strong evidence base that articulates the outcomes achieved through the department's non-core programs, along with a cost benefit analysis. Targeted programs for disadvantaged and disengaged students who are unable to thrive in mainstream school settings need to be supported by evidence of outcomes for these young people, alongside the social and economic costs to government of not investing in these young people.

^{28.} In 2013/14 South Australia received over half of total government revenue from the Australian Government. GST revenue grants accounted for 44.2% of South Australian Government Revenue. 22.5% South Australian budget expenditure to DECD for education and care services. 2014-15 Budget Paper 3: Budget Statement, Government of South Australia 2014.

^{29. 2014-15} Budget Paper 3: Budget Statement, Government of South Australia 2014.

ECONOMIC



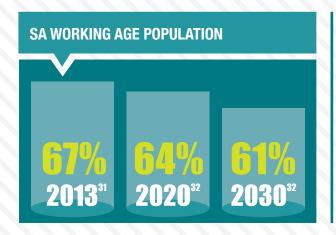
DECLINE IN MANUFACTURING JOBS

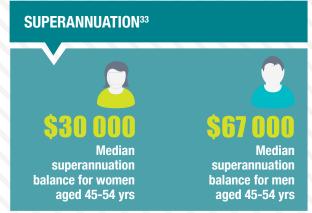
South Australia's manufacturing base has been diminishing over many years and this trend is likely to continue as a result of increased globalisation and the capacity of overseas markets to manufacture goods at lower cost. In the next five years, manufacturing jobs are expected to decline, particularly in Adelaide's northern suburbs with the closure of Holden in 2017 and indirectly to businesses involved in the supply chain. In the longer term, growth in employment in other sectors is expected to exceed that required to employ displaced workers from motor vehicle manufacturing. In the short term, however, there may be increases in unemployment rates in some areas as transitions in the labour market take place.

Major changes to the labour market may not be limited to motor vehicle manufacturing. Changes to the labour market in major regional centres such as Whyalla where one industry dominates are likely to result in high levels of unemployment in those areas and/or increased mobility as displaced workers move to areas with greater employment prospects.

There are connections between unemployment and an increased risk of poverty, which in turn is associated with a number of risk factors relating to child development and child maltreatment. Increased unemployment would have an impact on the department's delivery of services to vulnerable children and families in a range of settings.

IN ADDITION, INCREASED NUMBERS OF FAMILIES **EXPERIENCING** FINANCIAL HARDSHIP **MAY RESULT IN INCREASED EXPENDITURE** ON THE SCHOOL **CARD AND OTHER** PROGRAMS TARGETED TO DISADVANTAGED FAMILIES. POSSIBLE RESOURCE IMPLICATIONS **COULD EXTEND** TO MOVEMENT OF **SCHOOLS IN THEIR** INDEX OF EDUCATIONAL DISADVANTAGE.





AN AGING POPULATION

The aging of Australia's population is expected to put increased pressure on government spending into the future as increasing numbers of people exit from the workforce. There will be increased spending on pensions to make up shortfalls in retirement savings and increased healthcare costs.

For the department, there is not anticipated to be any difficulty in filling teaching positions in the short term as demand for qualified teachers is not expected to exceed supply. This may be impacted from 2020 with the requirement that all new teaching graduates possess a master's degree as a result of the current government's 2014 election commitment. The higher education reforms proposed by the Australian Government are another consideration that could impact on the affordability of higher education and may see some people choosing alternatives to a lengthy teaching qualification.

This trend is not unique to Australia and consideration of emerging practices that seek to ensure the transfer of knowledge and expertise between current and emerging leaders will be of value. Tapered retirement models that involve a gradual windback of an employee's duties and transition into alternative roles such as mentorship and knowledge sharing could be approaches that lessen the impact of the loss of skills, knowledge, wisdom and leadership as older workers retire.

Some employees may wish to remain in the workforce for longer, including in circumstances where individuals remain solely for financial reasons. In these situations, DECD would need to consider strategies to ensure that these employees can continue to make a valued contribution

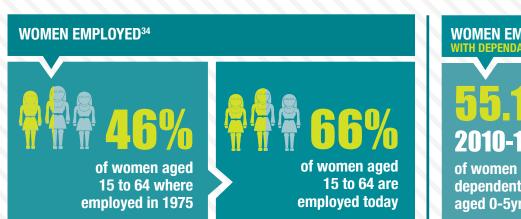
In responding to broader trends of globalisation and increased mobility of labour, there are opportunities for South Australia to target highperforming and specialist teachers internationally, with consideration to training and support needs to transition to the working in South Australian context. With recent moves to expand teaching of the SACE in Chinese schools, there could be opportunities to target Chinese teachers familiar with SACE. Such approaches may also be of benefit to DECD in responding to the recurring political focus on students learning a second language. The Australian Government's immigration policy will determine the options available. A review of the skilled migration and temporary activity visa programs is currently underway.

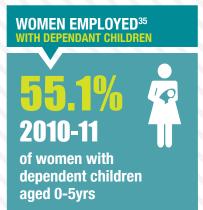
^{31.} Australian Bureau of Statistics, Catalogue No. 3235.0 - Population by Age and Sex, Regions of Australia, 2013.

^{32.} Australian Bureau of Statistics, Catalogue No. 3222.0 - Population Projections, 2012 (base) to 2101, 2013.

^{33.} In 2007, the median superannuation balance for women aged 45-54 years was \$30,000, which was 45% of the median superannuation balance of men in the same age group [\$67,000]. Australian Bureau of Statistics, Catalogue No. 4125.0, Gender Indicators, Australia, Jan 2013.

ECONOMIC





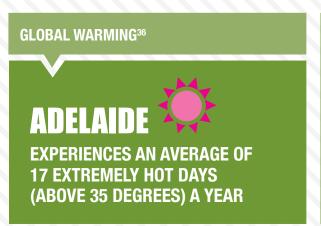
WOMEN'S WORKFORCE PARTICIPATION

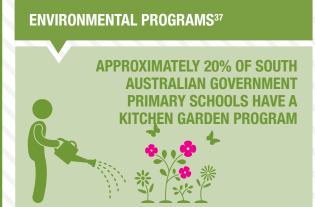
With productivity in western nations declining, one lever available to governments in order to boost productivity is to increase participation of women in the workforce. The trend towards increased workforce participation rates for women is well established and yet a number of participants in the environmental scan interviews questioned the degree to which DECD has responded to this by looking at how school days are structured to support the participation of women in the workforce.

CHILDCARE COSTS
AND AVAILABILITY
HAVE BEEN A RECENT
POLITICAL FOCUS
WITH THE RELEASE OF
THE PRODUCTIVITY
COMMISSION'S REPORT
ON CHILDCARE AND
EARLY CHILDHOOD
LEARNING. THE TREND
IN THIS AREA HAS BEEN
TOWARDS INCREASED
REGULATION OF THIS
SECTOR.

Depending on the success of Australian Government policy changes in increasing affordability and flexibility in early childhood care, there may be increased use of grandparents or other informal arrangements for the care of children. Higher numbers of people of retirement age may be a factor influencing demand for childcare services.

ENVIRONMENTAL





Climate change as a consequence of global warming is the primary environmental issue facing the global community. Forecast increases in global temperatures and associated increases in the intensity and frequency of extreme weather events are expected to have widespread implications for communities. These are long-term trends with the potential to have a significant impact on all South Australians into the future.

Adelaide currently experiences an average of 17 extremely hot days (above 35 degrees) a year.³⁵ By 2030 this number could rise to about 23 and will continue to increase in the future. More record hot days and associated heatwaves increase the risk of heatrelated illness and death, particularly in the elderly. The incidence of extreme fire weather in south- eastern Australia has already increased.

Increasingly variable rainfall patterns combined with higher temperatures pose significant risks to South Australia's agricultural areas and urban water supplies. Droughts are expected to become more frequent, longer in duration and impact on a wider area.

THESE CLIMATIC
CHANGES HAVE
IMPLICATIONS FOR
DECD'S MANAGEMENT
OF EXISTING PROPERTY
AND INFRASTRUCTURE,
AS WELL AS PLANNING
FOR FUTURE
INFRASTRUCTURE IN
ORDER TO MINIMISE
HEATING AND COOLING
COSTS AND ENSURE THE
PROVISION OF SHADED
SPACES FOR OUTDOOR
ACTIVITY.

^{36.} The Critical Decade 2013: Climate change science, risks and responses by Professor Will Steffen and Professor Lesley Hughes, Commonwealth of Australia [Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education] 2013.

^{37.} internal DECD Data source.

There are also implications for worker health and safety. The work of some departmental staff involves travel in cars, for example undertaking home visits. With an increased probability of extreme heat days, the services provided by these staff are likely to be disrupted. Use of existing technologies could be an alternative in some circumstances where the services do not require direct contact and observation of children and families in their home

Higher temperatures have the potential to increase utilities costs for sites, in particular an increase in water use for maintenance of grounds. There are existing opportunities for school and preschool sites to share costs or generate additional income through community use of facilities. Separate to any wholeof-government initiatives, there is an opportunity for the department, as a large consumer of energy, to take a position in reducing energy use and leading through action on climate change.

The subject of climate change continues to generate significant debate in the broader community and dire predictions of the longer-term impact of global warming often appear in the media. It is anticipated that there will be a continuing role for education and care settings in responding to children's concerns about the impact of climate change and sharing what sites can do at a local level to address this challenge.

In responding to climate change, as well as technological and social change, DECD may also wish to consider opportunities for greater involvement of growth industries in helping to shape or deliver curriculum that will be relevant to a future labour market.

ENGAGEMENT WITH NATURE

The last 20 years have seen dramatic shifts in lifestyle trends, such as the nature of houses and gardens, urban design, use of technology and work patterns. Research has shown that there is a clear link between childhood experience of nature and a life-long valuing of the environment and is positively associated with physical activity and mental health.

Through initiatives such as Nature Play and the Preschool Outdoor Learning Areas project, the South Australian Government is responding to research that shows that South Australian children are spending less time in nature than at any other time in our history. It has been estimated that the average Australian child spends less time outdoors than a maximum security prisoner³⁸.

The children and young people attending DECD preschools and schools are the next generation of environmental stewards. Given the environmental challenges that this generation will face in the future, natural learning environments and playspaces in preschools and schools will be the classrooms for this generation of children and young people.

DECD may need to consider the need for natural play spaces in its planning and design of future learning environments and expansion of programs that support children's engagement with nature such as the kitchen garden programs.

POLITICAL

SA GOVERNMENT

One year has passed since the last state election. The Government's main areas of focus centre on increased school autonomy and decentralisation, amalgamations of schools and support to improve teacher quality. Further amalgamations of schools into 'super schools' will have implications for the way in which schools engage with their local communities, in contrast to smaller schools.

The outcomes for students attending super schools will need to be monitored closely. Any evidence of poorer outcomes in comparison to other schools risks this initiative becoming further politicised.

The South Australian Government has also been forced into a reactive position in response to several high-profile incidents of child sexual abuse and neglect over the past few years. In the short term these issues are expected to continue to influence political decision-making. Addressing the damage to reputation as a result of these incidents will be a key challenge for DECD.

Another challenge for DECD may be in supporting local sites to exercise autonomy in decision-making and at the same time applying system-wide approaches with the aim of improving the education and care system overall.

HAVING A CLEARLY
DEFINED MODEL
FOR LOCAL SERVICE
DELIVERY AS OUTLINED
IN THE BUILDING A HIGH
PERFORMING SYSTEM
BUSINESS PLAN WILL
PROVIDE THE BASIS
FOR CONSIDERATION
OF HOW DECD MAY
CHOOSE TO RESPOND TO
SOME OF THE TRENDS
AND EMERGING ISSUES
OUTLINED IN THIS
REPORT.

STATE ELECTION 2018

The outcome of the State Government election in March 2018 could bring further change to departmental structure and service delivery.

During the 2014 election, attention to child protection was focused primarily on the structure of the department. While a change of government or the findings of the South Australian Child Protection Systems Royal Commission may see this issue raised again, the broader trend within social services towards delivering joined-up services to support children and families with multiple needs is unlikely to change over this period, regardless of where agencies sit within government portfolios.

In education, one of the main policy differences between the State Labor and Liberal parties was the placement of Year 7 students in secondary school or having them remain in primary school. This continues to be raised as a political topic and is likely to remain topical until the difference in current Australian Government funding levels between South Australian Year 7 students and Year 7 students in other states and territories is resolved.

NATIONAL REFORM AGENDA

The debate on reform of the federation and reform of Australia's tax system has potential to significantly influence the delivery of education and care services. The method of allocation of goods and services tax revenue may result in changes to the proportion of funding being allocated to South Australia. The removal of horizontal fiscal equalisation and distribution of GST revenue on a per capita basis would result in a 21% decrease in state GST revenue based on 2013-14 funding³⁹. Options to broaden the GST base to include health and education services may increase state revenue but could also impact on the affordability of nongovernment schooling for low income families, resulting in an increase in enrolments of students in government schools.

The establishment of standardised testing through the National Assessment Program has placed increased pressure on schooling systems to improve academic outcomes. In the face of flat lining outcomes in advanced western countries and comparisons of the performance of Australian schools relative to other countries, governments face pressure to come up with approaches for improving academic performance.

Following the review of the Australian Curriculum in 2014, the national political focus has been on a 'back to basics' approach to curriculum and pedagogy with a primary focus on literacy and numeracy. Further changes at the national political level at this stage in the electoral cycle are anticipated to be smaller in scale and impact on the overall direction of schooling.

There has been increasing national attention on the quality of teacher education and the Teacher Education Ministerial Advisory Group Report was released on 13 February 2015. Initiatives aimed at enhancing teacher training to improve the skills of graduates is likely to be a continuing focus for the Australian Government for the remainder of its current term.

The next federal election is due to be held before January 2017.

CHILD PROTECTION INQUIRIES

Recommendations from the South Australian Child Protection Systems Royal Commission, national Royal Commission into Institutional Responses to Child Sexual Abuse and the Review of the South Australian Adoption Act are likely to be the primary political drivers of change in the areas of child protection and child safety over the next five years. The recommendations of the Coroner in the Inquest into the death of Chloe Valentine will also influence changes to the child protection system over the near future.

While there may be some process changes to investigative responses to notifications of child abuse and neglect, alternative models for intervening with families at risk and outsourcing provision of out-of home-care could receive increased attention.

SOCIAL IMPACT BONDS

An emerging issue in the delivery of community programs is the use of social impact bonds or other outcomes-based funding models to achieve defined outcomes with the aim of reducing costs to government over the longer term.

A trial of social impact bonds is currently underway in New South Wales. There are two programs being delivered to support children in out-of-home care to be restored safely to their families, or prevent those at risk from entering care. Both bonds have raised private capital to fund intensive services.

A KEY CONSIDERATION FOR SOUTH AUSTRALIA WILL BE THE CAPACITY OF THE NON-**GOVERNMENT SECTOR TO DELIVER THE SAME OUTCOMES AS THOSE** NON-GOVERNMENT **SERVICES IN NEW SOUTH WALES. THE PROCESS** OF TRIALING SOCIAL IMPACT BONDS IN SOUTH **AUSTRALIA IS BEING LED** BY THE DEPARTMENT OF THE PREMIER AND CABINET.

As these models develop, the focus for the department will be on maintaining a strong link between policy and implementation through the contract management process.



