

# **New South Wales Curriculum Review**

# **NSW Education Standards Authority**

**November 2018** 

Anne Hampshire Head of Research & Advocacy Level 9, 117 Clarence Street GPO Box 10500 Sydney NSW 2001 Telephone 02 9085 7249 Facsimile 02 9085 7299 anne.hampshire@thesmithfamily.com.au



# Overview of The Smith Family

The Smith Family is a national charity founded in 1922 to improve the lives of disadvantaged children and young people in Australia. Almost a century on from its founding, it is now the nation's largest children's education charity.

Our vision is a better future for young Australians in need. Our mission is to create opportunities for young Australians in need by providing long-term support for their participation in education. This mission is founded on the belief that every child deserves a chance.

Our mission guides every element of our work, including program development and delivery, research, advocacy and fundraising. The Smith Family delivers programs in each state and territory in Australia, in over 90 communities, including many regional and rural communities.

In 2017-18, The Smith Family supported more than 150,000 disadvantaged children, young people, parents, carers and community professionals through its education-focussed programs. Over 120,000 children and young people participated in programs run by The Smith Family. We are supporting 43,000 financially disadvantaged children and young people on our largest program, the *Learning for Life* educational scholarships.

We have a unique longitudinal dataset of young people participating on *Learning for Life*. It includes demographic, administrative and outcomes data. We are tracking the school attendance, school completion and post-school engagement in work and/or study of all young people on the program. We are also analysing this data in a systematic way in order to contribute to building the Australian educational evidence base.

In 2017-18, The Smith Family's total income was approximately \$130 million. Around 70 per cent of this funding comes from private donations from individual supporters, corporate partners, universities, trusts and foundations, and bequests. There are over 230 partnerships helping to sustain our programs. Only a quarter of The Smith Family's income is sourced from different levels of government.

As part of our leadership and collaborative work in the sector, The Smith Family is a member of a number of organisations and represented on a number of advisory groups and boards. This includes our Chief Executive Officer, Dr Lisa O'Brien, being a member of the recent Commonwealth Review to Achieve Educational Excellence in Australian Schools.



#### 1. Introduction

The Smith Family welcomes the opportunity to contribute to the review of the New South Wales Curriculum being conducted by the NSW Education Standards Authority. Children and young people growing up today are compelled to manage rapid and persistent economic, social and technological change at home, at school and in the community generally. It not only affects how they learn, but how they forge meaningful social networks, participate in their local community, and plan for their own future such as career or further study.

At school, they are expected to develop fundamental cognitive skills such as numeracy and literacy, acquire subject knowledge as well as build non-cognitive skills such as critical thinking and problem solving. We appreciate the challenge of ensuring the quality and relevance of the Curriculum, in this sophisticated learning environment. The Curriculum must be sufficiently flexible to encourage teaching tailored to individual students as they progress through school, and sufficiently rigorous to produce quality, in-depth learning and skills development. It must be practical to ensure children and young people are being prepared for the 'real world' whilst also teaching academic fundamentals.

The Smith Family commends the Review placing equal importance on engaging young people and rewarding them for hard work, and ensuring they are prepared to be lifelong learners and 'flourishing and contributing citizens'. It is pleasing to see that this Review intends to build on recent reviews into school and early childhood education, as they provide overarching policy frameworks that can support the ambition of developing a curriculum that best equips students for contemporary life.

The Smith Family is not involved in day-to-day teaching in Australian schools. However, we have partnerships with over 500 schools, predominantly Government schools, across the country. We deliver educational programs and support to disadvantaged students in 32 communities across NSW, including our main program, *Learning for Life*, to around 14,000 students. Drawing on our experience in these communities and our ongoing program of research, we offer several recommendations in this submission. They are aimed at ensuring that the Curriculum is as relevant to students growing up in the 21<sup>st</sup> century as possible by:

- actively engaging parents in their children's learning;
- involving the community and business sectors in education;
- teaching non-cognitive skills in the most effective manner available;
- ensuring students have sustained access to post-school planning and careers support;
- revaluing vocational and educational training as a viable learning option in schools;
- improving the attractiveness of STEM disciplines;
- better understanding the background of individual students; and
- better measuring student achievement and development.

These points are detailed below. A strengthened Curriculum will help young people become academically proficient and also practically skilled, adaptable and resilient, with firmer connections to our community, economy and democracy.



#### 2. Some context for this review

An important context for this review are the individual life circumstances experienced by children and young people in NSW. This includes the extent of child poverty and disadvantage and how this plays out in the day-to-day lives of young people. Child poverty impacts on young people's experiences, the resources they have access to, their networks, and potentially their engagement with school and learning, all of which are relevant context for this curriculum review.

There are 1.1 million children and young people living in poverty in Australia today, with the number in NSW being proportionate to the state's population. Recent research led by Professor Peter Saunders from the Social Policy Research Centre at the University of NSW and undertaken in partnership with the NSW Department of Education, The NSW Advocate for Children and Young People and The Smith Family has explored what poverty, material deprivation and social exclusion looks like from the perspective of young people in NSW.

The Material deprivation and social exclusion among young Australians: a child focused approach research showed that students in NSW Government high schools and on The Smith Family's Learning for Life program<sup>3</sup>, agreed that the following school-related items were essential for all young people to live a 'normal' life:<sup>4</sup>

- A computer or other mobile device;
- Internet at home;
- Books at home suitable for their age;
- Clothes you need for school (including sports gear);
- Money to pay for classes or activities outside of school;
- Extra curricular activities at their school (like sport or music); and
- Going on school trips or excursions at least once a term.

The technology items (a computer and internet access) were identified by young people as supporting their participation and engagement in school.<sup>5</sup> The lack of a computer was seen as potentially impacting on young people's attitudes to and experiences of schooling, as well as their overall wellbeing. Young people without the internet at home indicated they were unable to complete their homework and assignments.

<sup>&</sup>lt;sup>1</sup> ACOSS and UNSW Sydney, *Poverty in Australia 2018*, October 2018, p 15, 65.

<sup>&</sup>lt;sup>2</sup> Saunders, P., Bedford, M., Brown, Judith, Naidoo, Y., Adamson, E., <u>Material Deprivation and Social Exclusion Among Young Australians: A child-focussed approach</u>, November 2018.

<sup>&</sup>lt;sup>3</sup> Young people on this program are living in financially disadvantaged families.

<sup>&</sup>lt;sup>4</sup> Saunders, P., Bedford, M., Brown, Judith, Naidoo, Y., Adamson, E., <u>Material Deprivation and Social Exclusion Among Young Australians: A child-focussed approach</u>, November 2018, p 76.

<sup>&</sup>lt;sup>5</sup> Saunders, P., Bedford, M., Brown, Judith, Naidoo, Y., Adamson, E., <u>Material Deprivation and Social Exclusion Among Young Australians: A child-focussed approach</u>, November 2018, p 34-35.



Activities such as school camps, extra-curricular activities and excursions were identified as both contributing to young people's engagement with their peers, as well as stimulating their interest in various activities and helping their learning journey.<sup>6</sup>

Despite the above items being identified as 'essential' by young people, significant proportions of them, particularly those from financially disadvantaged backgrounds did not have them. For example:<sup>7</sup>

- 1 in 5 students in government high schools and on the *Learning for Life* program did not go on school trips or excursions at least once a term;
- 1 in 5 students on the Learning for Life program did not have the internet at home;
- 1 in 4 students on the *Learning for Life* program did not have money to pay for classes or activities outside of school; and
- 1 in 10 students on the *Learning for Life* program did not participate in extra curricular activities at school such as sport or music.

Overall, 1 in 5 students in government high schools and 2 in 5 students on the *Learning for Life* program were deprived of three or more of the 18 items young people identified as essential, with 1 in 10 of the *Learning for Life* students being deprived of 7 or more of these items.<sup>8</sup>

Importantly for this review, this research showed the educational consequences for young people of material deprivation and social exclusion. There was a clear negative relationship between how well students feel they are doing at school, their sense of belonging to the school community and general satisfaction with schooling *and* the level of deprivation they are experiencing.

Deprivation among children and young people is an obstacle that prevents many of them realising their full potential. It is therefore an important context for the focus of this review given its broad aims of enhancing the effectiveness of school education.

# 3. Parental engagement in their children's learning

The Smith Family recommends that a priority for the Review be an acknowledgement of the importance of parental engagement in their child's learning. There is strong evidence of the positive impact of parental engagement on children's educational and career aspirations, the development of positive mindsets, their ability to set goals and to develop important qualities such as persistence. Students with engaged parents, no matter what their income or background, are more likely to do well at school, graduate from school and go on to higher education. Importantly, parental engagement in children's learning is a bigger predictor of how children do in school than a family's socio-economic status.

<sup>6</sup> Saunders, P., Bedford, M., Brown, Judith, Naidoo, Y., Adamson, E., <u>Material Deprivation and Social Exclusion Amongst Young Australians: A child-focussed approach</u>, November 2018, p 34-39.

<sup>&</sup>lt;sup>7</sup> See also, <u>Snapshot: Material Deprivation and Social Exclusion Amongst Young Australians: A child-focussed approach</u>, as cited above.

<sup>&</sup>lt;sup>8</sup> See also, <u>Snapshot: Material Deprivation and Social Exclusion Amongst Young Australians: A child-focussed approach</u>, as cited above.



The recent *Review to Achieve Educational Excellence in Australian Schools* highlighted the need for a core set of agreed measures to be established to drive improvements in policies and practices in this area. The Smith Family believes this thinking should underpin this Review's considerations, with work to develop and integrate such policies and practices, including but not be limited to offering support directly to parents to better understand the relevance of the Curriculum to their children's learning, and to their post-school options being required.

Parents need to be empowered in their role as their child's principal education and careers advisor, and have greater access to information regarding the core components of the Curriculum, and the career development opportunities available to their children. This should be applied from the early school years all the way through to the end of secondary schooling.

Teachers and schools need to be supported and trained to work respectfully with parents/carers as partners in their children's education.

#### 4. Involving the community and business sectors in education

Complementing a stronger focus on parental engagement in children's learning, The Smith Family also recommends that the design and delivery of Curriculum needs to actively include community organisations and the business sector.

The current Curriculum tends not to focus sufficiently on practical learning or prepare students for the realities of contemporary living and all its challenges. This is particularly relevant regarding future employment pathways for young people. The pace of change in the labour market in recent years has been unprecedented and there is no indication that this will abate. Ensuring strong and dynamic relationships at all levels of the education system with community and business, is critical if young people are going to develop the knowledge, skills, attitudes and behaviours needed to thrive in this reality. It is The Smith Family's experience is that many community and business organisations want to support young people in this.

Given the complex range of individual, family, school and community factors that influence educational and employment outcomes, the need for shared responsibility, and cross-sectoral and cross-institutional efforts to address the challenges within the existing school system is clear. Encouraging cross-sectoral partnerships, including at the school level, will help ensure the Curriculum is as practical as possible, and grounded in the lived experience of the community.

Community organisations, like The Smith Family, play an important role in brokering relationships between young people and business. The community sector is able to help provide students with access to valuable social, economic and cultural capital, a known enabler of positive post school transitions. To maximise the value from these types of partnerships, they must be embedded within the wider school system, including being explicitly valued by the curriculum. Doing so ensures we provide access to opportunities equitably across the state and provide all young people with the opportunity to develop networks with industry and business sectors, thereby deepening their understanding of career pathways and building aspirations.<sup>10</sup>

<sup>9</sup> Australian Government, <u>Review to Achieve Educational Excellence in Australian Schools</u>, March 2018, Finding 3, p xv.

<sup>&</sup>lt;sup>10</sup> Youth Action, *Career Guidance: The missing link in school to work transitions*, Youth Action Policy Paper, July 2017.



# 5. The importance of non-cognitive skills

It is widely acknowledged that schools in the 21<sup>st</sup> century must go beyond teaching subject knowledge for the purposes of rote learning, assessment and exams. Schools must also be equipping children and young people with a diverse set of general capabilities in order to become 'engaged thinkers, resilient and resourceful learners, creative problem solvers and active members of their communities'.<sup>11</sup> This is crucial to ensuring young people thrive in contemporary life during and after school. The types of capabilities required include but is not limited to the following:<sup>12</sup>

- critical thinking;
- creativity;
- problem solving;
- collaboration;
- motivation;
- self-efficacy;
- conscientiousness; and
- perseverance.

The Melbourne Declaration on Educational Goals for Young Australians established the importance of students acquiring such capabilities as part of core learning outcomes.<sup>13</sup> The Smith Family is cognisant that there is a proposal to review and update the Declaration, but for the present it provides a useful framework. It is currently difficult however, for many teachers across the state to teach these skills because they are not a core component, and teaching them is often added on top of existing responsibilities and commitments. Additionally, non-cognitive skills cut across many different subject-based disciplines, yet require to be taught within specific learning contexts.<sup>14</sup> For instance, they can be taught in a content-based course such as Maths or English, or through application in a practical project, such as the completion of a complex project.

The Smith Family recommends that the Review build on the framework of *The Melbourne Declaration*, and incorporate the teaching of non-cognitive skills, such as those identified above, into the Curriculum as a set of learning priorities with measurable outcomes. NSW schools need to be properly supported to teach such skillsets, with appropriate resources, training and materials. This also involves offering better, formal support to schools looking to undertake more project-based, non-cognitive skills development in addition to subject-based teaching. As identified above, the Curriculum should actively encourage schools to partner with non-government organisations in delivering these type of learning modules. There are a range of such organisations that can bridge the gap between schools and the business sector, and help offer opportunities for practical learning partnerships that can meet requirements in the Curriculum.

<sup>&</sup>lt;sup>11</sup> Lamb, S., Maire, Q., Doecke, E., <u>Key Skills for the 21<sup>st</sup> Century: an evidence-based review</u>, report prepared for the NSW Department of Education, 2017, p 3.

<sup>&</sup>lt;sup>12</sup> Lamb, S., Maire, Q., Doecke, E., <u>Key Skills for the 21<sup>st</sup> Century: an evidence-based review</u>, report prepared for the NSW Department of Education, 2017, p 3.

<sup>&</sup>lt;sup>13</sup> Ministerial Council on Education, Employment, Training and Youth Affairs, <u>Melbourne Declaration on Educational Goals</u> <u>for Young Australians</u>, December 2008, p 13.

<sup>&</sup>lt;sup>14</sup> Lamb, S., Maire, Q., Doecke, E., <u>Key Skills for the 21<sup>st</sup> Century: an evidence-based review</u>, report prepared for the NSW Department of Education, 2017, p 4.



Non-cognitive skills, such as critical thinking and analysis, not only help young people create lifelong learning habits or find viable career pathways. They also help ensure that they become active, engaged and discerning citizens. Given the turbulence and instability of current democratic politics, both in Australia and globally, this is a vital part of considering how to best revise the Curriculum.

Young people are now less likely to obtain news on current affairs from traditional and more verifiable media sources, instead relying on social media platforms and the opinions and experiences of their peers. A 2018 study demonstrated that young Australians aged 18 to 34 have the highest trust in news found on social media and via search engines. Additionally, a 2017 survey of 1,000 young Australians aged eight to 16 examined their news engagement practices. The results indicated that while roughly one third felt they could distinguish 'fake news' from real news, one third felt they could not make this distinction. The other third were uncertain about their ability. In the survey of 1,000 young Australians aged eight to 16 examined their news engagement practices.

Young people are growing up in an age where the internet offers enormous volumes of unregulated content, of which a significant amount is misinformation and biased views presented as objective 'fact'. A significant risk in our community discussions on policy and politics is that misinformation deliberately or inadvertently undermines informed debate and deliberation.

An important element of teaching non-cognitive skills is therefore to ensure young people do not simply accept the content they find, but understand how to discern and assess content, critically assessing the underpinning sources, biases, concepts, principles, and inherent limitations behind individual pieces of content and the platforms on which they are published. Our schools can help teach young people to be judicious and inquisitive in understanding the reliability of content. This in turn helps ensure young people become informed, discerning citizens, able to identify genuine news from misinformation, deploying capabilities to contribute meaningfully to public affairs.

#### 6. Ensuring students have sustained access to post-school planning and careers support

Research suggests that children start to rule out career options at an early age because of the unconscious influences of parents, friends and the stereotyping of occupations.<sup>17</sup> Once these limits are set, individuals will rarely consider broader alternatives.<sup>18</sup> Research also shows that disengagement from education, training and employment is not a one-off event occurring in isolation at the end of a student's schooling. Instead, it is the result of a long-term process that can begin in childhood and continue throughout the course of a child's schooling.

<sup>&</sup>lt;sup>15</sup> Park, S., Fisher, C., Fuller, G., Lee, J.Y, <u>Digital News Report: Australia 2018</u>, 2018, p 9, 28.

<sup>&</sup>lt;sup>16</sup> Notley, T., Dezuanni, M., Zhong, H.F., Howden, S., <u>News and Australian Children: How Young People Access, Perceive, and are Affected by the News</u>, November 2017, p 9; Notley, T., Dezuanni, M., <u>'Most young Australians can't identify fake news online</u>', *The Conversation*, November 20, 2017.

<sup>&</sup>lt;sup>17</sup> NSW Education and Communities, <u>The Case for Career-Related Learning in Primary Schools: An invitation to primary</u> school principals, 2014, p 2.

<sup>&</sup>lt;sup>18</sup> NSW Education and Communities, <u>The Case for Career-Related Learning in Primary Schools: An invitation to primary school principals</u>, 2014, p 2.



The Smith Family therefore recommends that the Curriculum better integrate career-focused activities, industry-focussed learning and post-school planning within the education system, including from the primary years. It means ensuring that career-focused learning is offered early, sustained over time, taps into students' passions, and is complemented with quality careers advice tailored to students' aspirations. As identified above, the Curriculum should encourage schools to work with community sector partners, that can help provide such programs and act as a bridge to the business sector.

This type of learning applies to a student's journey through both primary and secondary school. An earlier intervention within the primary school setting can help change perceptions about the world of work and the range of available opportunities, thereby building the foundations for positive transitions in the future. While some school communities are beginning to move towards the practice of delivering career education that supports young people's career development in the primary years, such initiatives are currently driven on a local level and are yet to become formally integrated more widely.<sup>19</sup>

It is important to not only offer career learning early, but sustain it over time as students progress through school, from the primary school years onwards. Evidence shows that there is strong relationship between student participation in career development activities, including elements of direct exposure to the contemporary working world, and positive attitudes towards schooling. Crucially, studies show that if young people can recall four or more structured career activities across their school life, they are five times less likely to be unemployed or disengaged from education or training.<sup>20</sup>

One of the key aspects to supporting students in these ways is to ensure that post-school options can be matched to individual student's passions and interests.<sup>21</sup> Education policy is yet to fully recognise that students work best when then their passions and interests are used as a motivator to learn. Initiatives such as the P-Tech, Big Picture schools and the careers programs offered by The Smith Family, are aiming to address this issue by engaging students in activities and projects that align with their interests.

An example of such a program is *Work Inspiration* which The Smith Family has partnered with other organisations to deliver since 2013. This program is delivered in schools to students from Years 9 to 12. It offers them a meaningful, practical opportunity to engage with the world of work, across different industries. Students spend time in various workplaces, interacting with employees, and learning more about the skillsets required for the particular industry. It helps create pathways for young Australians within and beyond school. It helps young people in the transition between school work and/or further study, and helps keep them attached to education and the labour

<sup>&</sup>lt;sup>19</sup> NSW Education and Communities, <u>The Case for Career-Related Learning in Primary Schools: An invitation to primary school principals</u>, 2014.

<sup>&</sup>lt;sup>20</sup> Kashefpakdel, E., Mann, A., and Schleicher M., <u>The impact of career development activities on student attitudes towards school utility: an analysis of data from the Organisation for Economic Cooperation and Development's Programme for <u>International Student Assessment (PISA)</u>, UK Education and Employers Research.</u>

<sup>&</sup>lt;sup>21</sup> Youth Action, <u>Career Guidance: The missing link in school to work transitions</u>, Youth Action Policy Paper, July 2017, p 9, 16, 28.



force. Current employers involved in the program include Microsoft, SAP, McDonalds, Hilton Hotels, Arup Engineering, DLA Piper, Audi, Kain Foundation and Flight Centre. Annually around 1000 students from The Smith Family's partner schools participate in *Work Inspiration*. This is just one example of the types of programs on offer throughout the state. However, these opportunities remain limited in scope.

There is strong evidence showing the value of ensuring students have access to high quality career advice while they are forming their post-school plans.<sup>22</sup> Unfortunately, current approaches to career advice within the school setting are highly inconsistent and often ad hoc. While examples of good practice certainly exist, there is no standardised approach within the curriculum. This is exacerbated by an ongoing lack of investment across schooling systems. We need to move towards an integrated model which incorporates individual support, parental/guardian involvement and partnerships with community organisations to support the diverse needs and aspirations of young people as they contemplate, and get ready, for the post-school future.<sup>23</sup>

#### 7. Revaluing the VET sector

As part of strengthening careers and post-school transition support for young people, there must be a revaluing of vocational education and training (VET). The Smith Family recommends that VET be better integrated into the Curriculum as a valuable learning pathway for all students, and efforts be made to ensure it is not treated as an inferior or second-rate option. By better integrating VET into the curriculum, students will have access to practical vocational training in fields with significant employment opportunities beyond school.

In recent years, Australia has systemically undervalued and underutilised the VET sector, and it has experienced declining enrolments and depreciating recognition. International evidence shows how effective the VET sector can be when it is delivered with quality, and recognised as a fully integrated component of the education system. Countries where a high proportion of students choose technical and vocational paths often have lower rates of youth unemployment, and vice versa. In countries like Switzerland, corporations play a key role in providing meaningful, paid work placements as part of vocational training for 70 per cent of school leavers. These traineeships ensure a supported transition to employment for young people and allow employers to participate in training their future workforce to develop the skills their organisations need.

Whilst Australia's VET system may require significant structural reform, the Review can still work towards ensuring that school students have positive, informed attitudes regarding the breadth and depth of opportunities available through the VET pathways, as well as full access to the different courses available. Currently, there is a perception that a vocational qualification is a less valuable education pathway compared to university. Similarly, people still link VET qualifications with

<sup>&</sup>lt;sup>22</sup> Kashefpakdel, E., Mann, A., and Schleicher M., <u>The impact of career development activities on student attitudes towards school utility: an analysis of data from the Organisation for Economic Cooperation and Development's Programme for International Student Assessment (PISA), UK Education and Employers Research.</u>

<sup>&</sup>lt;sup>23</sup> Youth Action, <u>Career Guidance: The missing link in school to work transitions</u>, Youth Action Policy Paper, July 2017, p 9.

<sup>&</sup>lt;sup>24</sup> Baker, K., <u>14-19 Education: A new Baccalaureate</u>, Edge Foundation United Kingdom, 2017, p 26.

<sup>&</sup>lt;sup>25</sup> Baker, K., <u>14-19 Education: A new Baccalaureate</u>, Edge Foundation United Kingdom, 2017, p 26.



traditional trades, when in fact, the VET sector currently provides training courses for nine out of ten occupations predicted to have the greatest growth of new jobs over the next five years.<sup>26</sup>

#### 8. Improving the attractiveness of STEM disciplines

Complementing some of the above recommendations, The Smith Family also recommends that the Review seek to improve the attractiveness of STEM disciplines to students across the state, given the likely employment opportunities available after school in the modern economy. If the Curriculum is to be as effective as possible in setting up young people for contemporary life, it must boost the study of STEM disciplines, including at the more complex levels.

A number of recent reports demonstrate clearly that the global economy is defined by digital disruption and rapid automation, and that a greater proportion of jobs will be found in STEM and digital related disciplines in the future.<sup>27</sup> International research suggests that 75 per cent of the fastest growing occupations require STEM skills and knowledge, while employment in STEM occupations is projected to grow at almost twice the pace of other occupations.<sup>28</sup>

However, in the Australian context, there remains a great deal of progress to be made in ensuring students are increasingly equipped with these core skills. There remain significant issues attracting school students to these subjects. According to a 2017 report by Ai Group, 'despite attempts by governments over the last decade to increase school student participation in STEM, the proportion of school students commencing in senior STEM-related studies has flat-lined at around 10 per cent or less.' Schools have not yet found a way to modernise and promote these subjects in a way that inspires student participation and engagement.

The Curriculum should provide an approach that actively encourages a greater uptake of STEM learning amongst young people. It should also combine the teaching of STEM with vocational and career opportunities for students, in order to demonstrate a direct relevance to the study of these subjects. There are programs currently running which allow schools to partner with local business for this purpose. For instance, the Pathways in Technology (P-TECH) national pilot involves creating long-term partnerships between industry, schools and tertiary education providers that enable businesses to play an active role in the learning and career development of their future workforce.<sup>30</sup> This includes mentoring and providing pathways from school to further education, training and employment, including opportunities for employment with the school's industry partners. The P-TECH styled model offers students studying for their Senior Secondary Certificate an industry supported pathway to a STEM related diploma, advanced diploma or degree. Students then have the option to continue their study at the tertiary level or pursue employment in a STEM related field, including job opportunities with the school's industry partners. Students participating

\_

<sup>&</sup>lt;sup>26</sup> Wyman, N., McCrindle, M., Whatmore, S., Gedge, J. & Edwards, T., <u>Perceptions are not reality: myths, realities & the critical role of vocational education & training in Australia</u>, Skilling Australia Foundation, Melbourne, p 6.

<sup>&</sup>lt;sup>27</sup> Committee for the Economic Development of Australia (CEDA), <u>Australia's future workforce?</u>, June 2015; Deloitte, <u>The future of the workforce: Critical drivers and challenges</u>, July 2016.

<sup>&</sup>lt;sup>28</sup> Ai Group, <u>Strengthening School – Industry STEM skills partnerships: Final project report,</u> 2017, p 7.

<sup>&</sup>lt;sup>29</sup> Ai Group, Strengthening School - Industry STEM skills partnerships: Final project report, 2017, p 7.

<sup>&</sup>lt;sup>30</sup> Pathways in Technology, 'Why P-Tech'.



in a P-TECH styled model study regular high school subjects such as English, science, and mathematics, while also undertaking an advanced STEM learning program with support from the school's industry partners.

At a more fundamental level, efforts must also be made to ensure that all students, regardless of their background, have access to up-to-date digital technology and are supported to develop the skills and learning dispositions to thrive in a digital world. NAPLAN ICT data highlights that students from disadvantaged backgrounds are on average significantly behind their more advantaged peers in the areas of digital literacy, confidence and interest. The data from the *Material deprivation* research highlights the high proportions of disadvantaged students without the basic technology and infrastructure to participate in the 21<sup>st</sup> century digital world. This must be urgently addressed as the delivery of the current (and future) curriculum, implicitly expects all students to have access to this technology and infrastructure and high level digital skills are now a prerequisite for economic, social and civic participation.

#### 9. Better understanding the backgrounds of individual students

The Smith Family recommends that the review consider how the Curriculum can best identify and accommodate the circumstances surrounding individual students as they start school and progress throughout each academic year. This is particularly salient to the challenging circumstances for students from disadvantaged backgrounds, but is also important for all students.

We are seeing a shift to more tailored, individualised learning and as such, it is important that the Curriculum addresses the fact that students arrive at school, or arrive at the beginning of a new school year, with very different levels of readiness and preparedness, with some cohorts at greater risk of falling behind throughout the year.

We will not be able to support this state's young people to become 'flourishing and contributing citizens' without a better understanding of their background and circumstances. There must be a sophisticated, multi-dimensional understanding of the nature and impact of disadvantage. For instance, the Curriculum should be mindful of the different experiences of students from low-income households where neither parent or carer works, students from families experiencing problems with inter-generational disadvantage, Aboriginal and Torres Strait Islander students, students with CALD backgrounds, students experiencing serious health or disability issues, and students from regional or remote communities across the state.

We already have clear data which shows that children from disadvantaged backgrounds, on average start school behind and have poorer school attendance, achievement, school completion and engagement and post-school futures, than their more advantaged peers. For example, in the early years, one in three children in the most disadvantaged communities is developmentally vulnerable in one of more key areas when they start school.<sup>31</sup> Among Year 5 students whose parents have not completed Year 12 or its equivalent, 60 per cent achieve above the national minimum reading standard compared to 94 per cent of Year 5 students whose parents have a

<sup>&</sup>lt;sup>31</sup> Federal Department of Education and Training Canberra, <u>Australian Early Development Census National Report 2015: A snapshot of early childhood development in Australia</u>, p 14.



university qualification.<sup>32</sup> The Smith Family's longitudinal research of the students involved in our *Learning for Life* program demonstrates that attendance and achievement are early indicators of students who are likely to have poorer long-term outcomes, as they help predict school completion and engagement in post-school work or further study.<sup>33</sup>

There is an infrastructure upon which a better understanding of the background of individual students can be built. The Australian Early Development Census has been measuring development vulnerability since 2009 and has a sophisticated data set that is informing schools and teachers of the development young children in the early years. However a similar dataset is required for primary and secondary school, in order to ensure that students who require additional support to succeed can be identified and assisted at the earliest intervention point possible. A national Unique Student Identifier is part of the infrastructure that can help support this. We appreciate the size and scale of developing a deep understanding of each student, yet its importance cannot be understated.

#### 10. Better measuring student achievement and development

The Smith Family recommends that the Curriculum incorporate a more fulsome measurement of student achievement throughout their schooling that complements the use of standardised testing. We are a supporter of NAPLAN but an over-emphasis on point-in-time measurements does not capture the full development of students as they progress on their education journey.<sup>34</sup> It is also important for schools, students and families to be able to measure the total gain that students make over an extended period of time, including their improvement in knowledge, cognitive and non-cognitive skill, work-readiness and personal development during their education.<sup>35</sup>

One of the key recommendations in the *Through Growth to Achievement* Report released this year, as part of the Review to Achieve Educational Excellence in Australian Schools, was introducing new reporting arrangements with a focus on both attainment and learning gain that was useful for students, parents and carers.<sup>36</sup> There is no systemic process in place to measure this type of achievement.<sup>37</sup> New South Wales has the chance to lead the nation in implementing this recommendation and set the standard for the rest of the Federation. We acknowledge that New South Wales uses the School Measurement Assessment & Reporting Toolkit (SMART) to help determine if student progress is adequate relative to others with similar levels of prior achievement, albeit still reliant on NAPLAN results.<sup>38</sup> The Review offers an excellent chance to

<sup>&</sup>lt;sup>32</sup> Australian Curriculum, Assessment and Reporting Authority (ACARA) 2017, <u>National Assessment Program: Literacy and Numeracy</u>, 2017, p 66-73.

<sup>&</sup>lt;sup>33</sup> The Smith Family, <u>Attendance Lifts Achievement: Building the evidence base to improve student outcomes</u>, March 2018, p.1-2.

<sup>&</sup>lt;sup>34</sup> Grattan Institute, <u>Mapping student progress: A state-by-state report card</u>, October 2018, p 3.

<sup>&</sup>lt;sup>35</sup> Scott, J, 'Measuring learning gain in higher education is a complex challenge', Times Higher Education, November 2016.

<sup>&</sup>lt;sup>36</sup> Australian Government, Review to Achieve Educational Excellence in Australian Schools, March 2018, Rec 4, p xiii.

<sup>&</sup>lt;sup>37</sup> Mitchell Institute, Preparing Young People for the Future of Work: Policy roundtable report, March 2017, p 8.

<sup>&</sup>lt;sup>38</sup> Grattan Institute, <u>Mapping student progress: A state-by-state report card</u>, October 2018, p 11; NSW Department of Education, <u>Validation of Assessment for Learning and Individual Development: Information for government schools</u>, p 2.



develop a better, more comprehensive measurement which can be used effectively to track broader student outcomes over time.

The Smith Family also commends the development and implementation of the *Tell them from me* survey by the NSW Department of Education and would urge that this be continued, with analysis potentially feeding into a range of areas of work of the Department, including the curriculum.

#### 11. Conclusion

The Curriculum is one of the key foundations on which the state's schooling system can better reflect the realities of contemporary life. Reforming it to ensure it equips all students with the skills, tools and pathways necessary to thrive in 21st century life is an immense challenge, given the size and diversity of both the student population and the school sector in New South Wales. Yet there is a navigable road forward for reform drawing on the experience and expertise from multiple sectors in the community. If the Review is able to strengthen the Curriculum in core areas, such as formally introducing the development of non-cognitive capabilities, providing better career-based learning, improved parental engagement and accommodation of the background of individual students to name just a few, it will have made a decidedly positive contribution to the education system. It will also have made a marked contribution to our community by helping to create flourishing and contributing citizens that can sustain our society, economy and democracy in the decades to come.