

Public Education in New South Wales
Submission to the Independent Inquiry on ‘Valuing the Teaching Profession’

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I am providing a submission to the Independent Inquiry on ‘*Valuing the Teaching Profession*’ and, while acknowledging terms of reference, I will take a more selective look at how digital media and technologies have affected teachers’ work and what possible impacts they are having on students’ wellbeing, health, identities and learning.

Therefore, this submission will:

1. *Identify some of the key features that distinguish the teaching profession in NSW from those found in better performing education systems elsewhere;*
2. *Describe commonly accepted impacts of digital media and technologies on students and their learning in school;*
3. *Discuss the main challenges in integrating digital technologies as part of pedagogy and learning in normal situations and during the time of health crisis; and*
4. *Make recommendations for supporting teachers and raising the status of the teaching profession.*

A Teachers’ work in New South Wales through international comparative lens

Comparable data sources about the teaching profession have significantly improved during the last decade. Although fully reliable evidence of teaching and learning from different countries is extremely difficult to gather, we now have a knowledge base that allows reasonable useful comparisons of teachers and their work in large number of countries. This knowledge base has some significant limitations (self-reported data, sampling issues, and coverage) but if these limitations are kept in mind, available international data allows system-level comparative analysis that is helpful in putting national data about the teaching profession into more understandable context.

The two main organisations that have collected systematic data about teachers’ work around the world are the OECD (Organisation for Economic Cooperation and Development) and Education International (EI) which is an international confederation of national teacher associations around the world. OECD’s Teaching and Learning International Survey (TALIS) that is the major source of comparable data about teachers and teaching and is repeated every five years collecting self-reported data about lower secondary school teachers. EI represents 384 teacher organisations in 178 countries and territories and holds the vast majority of information about the state of teachers and their work globally. In 2011 OECD and EI jointly

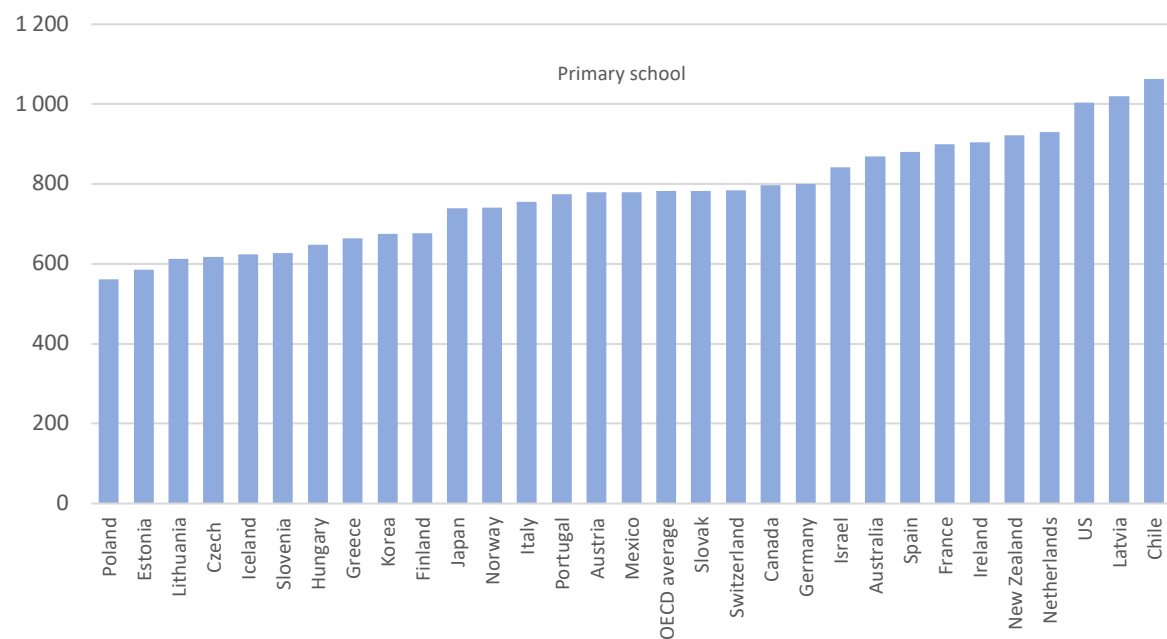
launched the *International Summit on the Teaching Profession* which meets annually and produces up-to-date knowledge about the status and issues related to the teaching profession.

Relying on this data and analysis the following three international trends are relevant for this submission. There are several other trends affecting teachers and teaching in schools, but they are excluded in this submission.

Uneven workloads and required teaching hours between OECD countries

International statistics suggest that how teachers experience their work varies greatly from country to country. Teaching has become more complex and demanding everywhere but, at the same time, teachers spend more time than before in administrative issues and other non-teaching duties that often negatively influence the quality of teaching. OECD’s TALIS 2018 shows that more than half of secondary school teachers in Australia think that they have too much administrative work at school and one quarter believe they experience a lot of stress at school (OECD, 2019b). These figures are close the highest among 48 countries that took part in that survey.

Figure 1. Number of statutory net teaching hours in public primary schools over the school year in OECD countries (2018)



Source: OECD database

Figure 1 shows annual statutory net teaching hours in public primary schools in some OECD countries (trend is similar across the countries in secondary schools). This data shows that teachers in different countries have very different teaching loads before all administrative and other non-teaching duties are added to their total annual workload. According to OECD, Australian primary school teachers have 870 required hours of teaching in their annual workplans, compared to 783 in OECD countries on average. In the United States primary teachers teach about 990 hours and in Finland 677 each year. Full time primary school teachers in NSW teach 21 hours and 45 minutes a week which equals over 900 hours per

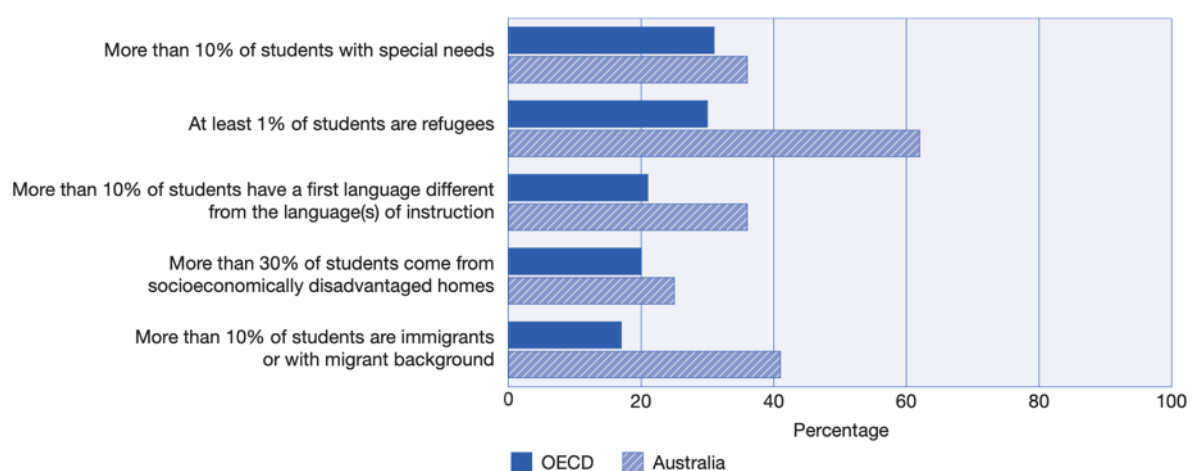
annum. Primary teachers get 2 hours a week of release from classroom teaching, but this time is increasingly taken up by administrative requirements. OECD’s TALIS 2018 also reveals that lower secondary school teachers in Australia work, on average, 45 hours a week compared to 39 hours on average in the OECD countries. The average working week for Australian teachers has increased by 2.1 hours since TALIS 2013.

Increasing workload becomes especially troublesome when it is due to more time spent on administration and non-teaching activities which can have negative affect on the quality of actual teaching. Higher performing education systems typically allocate more time to teachers to collaborate during school day with one another on issues related to improving teaching and learning for the benefit of whole school. What growing hours of administration may do is to create more pressure on teachers in terms of working outside teaching hours, decrease time available for professional learning and school improvement, and leaves less resources available to help students who would need help during school days to succeed.

Increasing student diversity in schools and classrooms

Student populations are becoming more diverse in most OECD countries and this has also been a clear trend in NSW during the past two decades. Because of this increasing diversity, teachers also experience more challenges in their daily work. In Figure 2, OECD’s TALIS 2018 survey shows that more than one third of secondary school teachers teach in schools where there are over 10 per cent of students who are non-native speakers (OECD, 2019b). The same proportion of teachers teach in schools where every tenth student has some kind of special educational needs. According to data from the same survey, socio-economic disadvantage seems to concentrate in some particular schools and communities in Australia. A quarter of secondary school teachers work in schools where a third or more of students live in disadvantaged homes. All these changes influence teachers’ work and require special attention if high quality teaching and learning in NSW schools is to be achieved by all children.

Figure 2. School composition in OECD countries on average and in Australia in 2018



Source: ACER (2019)

What makes these statistics significant to teachers is the change in many of these school composition indicators over short period of time. For example, there has been 12 percent increase in the number of lower secondary school teachers who teach in schools where the share of students with special educational needs is over 10 percent. It is evident that this and other similar trends in diversity and inequity cause new challenges to many teachers in NSW schools.

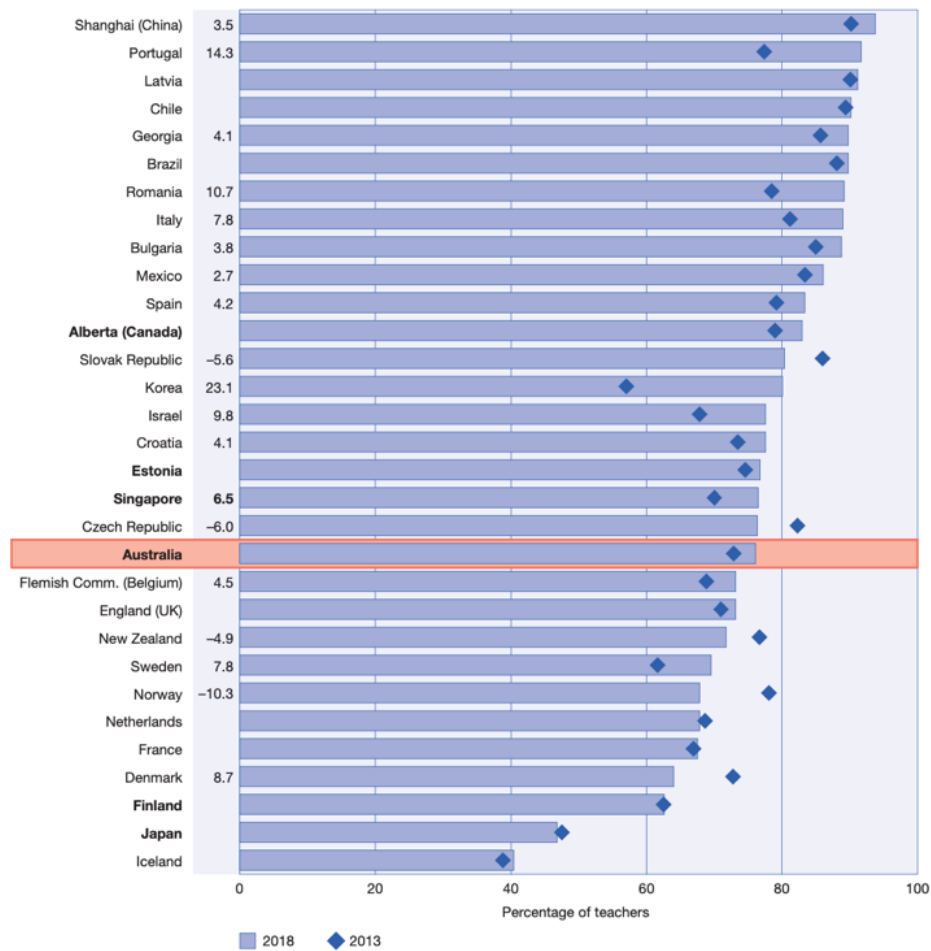
Digital media and technology as pedagogical tools

Since the beginning of this century schools around the world have been catching up with technological developments in two principal ways. One, curricula have been revised to include content and even new subjects (coding, artificial intelligence, digital media) in order to provide students with necessary knowledge and skills about technology they will need in further studies and in the world of work. Two, teachers' pedagogy has been continuously upgraded to enable them to better integrate digital media and technologies in teaching and learning in schools. Both of these developments have had a big influence on teachers' work. Not only have most teachers taken a lot of time to learn about these new developments and how to use them, but new devices and facilities in schools have required schools to think collectively about how to make educational technologies a purposeful part of work of schools without jeopardising essential human interactions between teachers and students.

We often say that schools change slowly but technology is making that change faster. How far schools proceed in integrating media and digital technologies in teaching and learning depends on many things. The resources that the schools have available is a critical condition. The OECD estimated in 2018 that, on average, about two thirds of schools have proper facilities and enough expertise to properly embed technologies as part of their pedagogical practice (OECD, 2019a). But there is a huge variation within countries from school to school.

Figure 3 shows the changed percentages of teachers who frequently or always let students use information and communication technologies for projects and classwork between 2013 and 2018. About three quarters of Australian teachers belong to the active user group who frequently use technology in classroom teaching and learning. It is noteworthy that research evidence of the benefits of computers to student learning are mixed and depend on the situation. Tellingly, OECD concluded based on its own data from PISA surveys that computers don't improve student achievement in school, indeed it found a weak negative relationship between use of technology in teaching and student learning outcomes (OECD, 2015).

Figure 3. Change in teachers' encouragement of students using ICT for projects or classwork in TALIS 2013 and TALIS 2018



Source: Australia TALIS 2018 Report (2019)

According to TALIS 2018 the most pressing issue impeding instruction in disadvantaged schools in Australia was a shortage of digital technology which could be easily used in teaching. Every third teacher identified this as a major obstacle to instruction compared to 13 per cent of teachers in more advantaged schools.

B Teaching changing students in changing times

Teachers are experiencing another fundamental change in their work – the students. Many studies in different parts of the world have come to similar conclusions that children and young people are not the same as they were just a decade ago. They are more connected to one another and the world with their own portable digital gadgets. They are more concerned about their future and the fate of our planet. And many learn the things which could only be learned at school now earlier, faster and easier through digital media and technologies. Some people call those in school now the iGen (Twenge, 2018).

But there is another side of these changes in our youth that makes many teachers and parents worried. Student health, on average, is declining in many countries. Youth mental wellbeing has reached alarming low levels and it is not certain what are the causes of these

trends. Although being connected almost constantly with others, loneliness is one of the most common reason for children's illbeing. Parents in Australia are well aware of these inconvenient trends which affect their children. But teachers are the ones who need to cope with these challenges in schools every day without always being prepared to know how.

There is no shortage of research to prove that these trends are real in Australia and in NSW. This is perhaps the biggest single issue that has changed in our schools and classrooms during the past decade. To teach is no longer just to pass knowledge to student and teach them required skills at school. Teaching, in many schools today, has become a job which requires expertise not just as an educator but also as a healthcare worker, social worker, wellbeing coach, parenting specialist and psychologist. Not all teachers know how to perform this wide range of expert roles in their school. It is also important to keep in mind that Australian teachers already work longer hours every week than many of their peers in other countries which leaves many of them even less well prepared to meet the needs of their students at school.

In 2019 the UNSW's Gonski Institute launched a research project titled "Growing Up Digital Australia" to find out more about possible impacts of digital media and technologies on young people's health, wellbeing and learning in Australia, including NSW. This study, which is about to take a longitudinal look at these potential trends is a joint project with Harvard Medical School in the United States and Alberta Teachers Association in Canada. The first results provide a window to changing Australian schools through the eyes of their teachers. Here are some of those findings that are the most relevant for this inquiry.

We asked almost 2,000 teachers in NSW and other parts of Australia to take a good look at their students today and compare what they see to the situation three to five years ago. Teachers were asked to identify possible changes in students' wellbeing, behaviours and learning when they were at school. The most striking single finding was that almost 60 per cent of teachers observed that there has been a clear decline in students' overall readiness to learn. Lack of readiness to learn manifests itself in various ways in classrooms, according to teachers, including difficulty with concentrating on the task at hand, coming to school tired, being easily distracted by personal gadgets, and regularly multi-tasking during the lessons. As a consequence, several teachers observed declining literacy, numeracy and oral language skills, as well as growing difficulties with applying deeper meta-cognitive skills to their learning and stay on tasks.

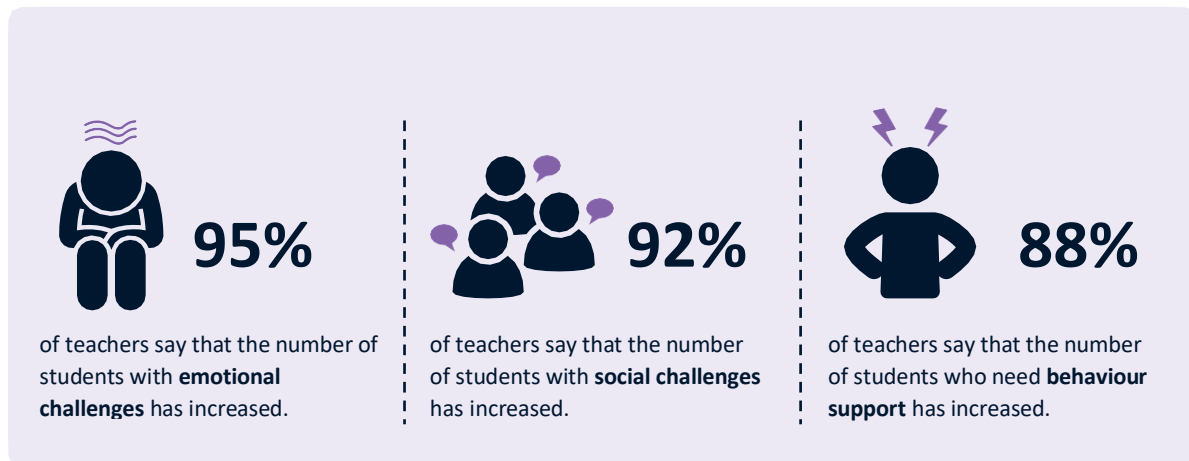
This research highlights the great concern shared by a vast majority of Australian teachers today about the increasing use of digital technologies and how this is impacting on students' social and emotional competencies, especially their ability to form and maintain relationships.

It is evident based on this study and some other research exploring young people's changing behaviours that schools are becoming increasingly complex because larger numbers of students who come to school every day with intellectual, social, emotional and behavioural challenges. At the same time there are more students who live in difficult circumstances outside of school due to socio-economic issues, resettlement or language barriers.

As shown in Figure 4, it is clear that the complexity of students' special needs has increased in the last 3-5 years according to Australian teachers. In particular, 95 per cent of teachers have noticed increases in the number of students presenting with emotional and

psychological challenges. An important question is how children with emotional challenges are faring at school. There is a significant positive correlation between students presenting with emotional challenges and their overall readiness to learn, meaning that students presenting with emotional and psychological challenges are the most likely to have a somewhat or significantly decreased readiness to learn.

Figure 4. Percentage of teachers who observe increased numbers of students in school with emotional, social and behavioural challenges compared to three to five years ago



Source: Gonski Institute (2020)

We don't know exactly what is behind these changes which many children increasingly seem to be living with. It is important to note, first of all, that identical trends in declining wellbeing, health and learning of young people have been identified in other countries as well. Growing Up Digital Alberta which was based on a similar survey instrument in Canada four years earlier made almost identical findings (Gonski Institute, 2020). It is probable, however, that extensive use of digital media and technologies by young people as early as age 5 has a significant role to play in understanding reasons for these changes.

Growing Up Digital Australia shows that the vast majority (84 per cent) of teachers in Australia think that digital media and technologies are a growing distraction in the learning environment. Most of this distraction is due to the constant presence of smartphones and portable gadgets, whether that be inside or outside the school gate. One teacher expressed what she sees in her classroom daily like this:

“Students are generally far less equipped to deal positively (and independently) with the social and emotional challenges of a school day. Many of their parents show much greater tendency to weigh in on little issues and frequently challenge teachers' dealings with these situations which make it hard for teachers to act decisively and confidently (too worried about parent backlash).”

Another teacher outlined the changing nature of students in her school:

“We have a higher number of students who have diagnosed psychological conditions or learning problems. We have a higher number of students who are emotionally or socially challenged, a higher number of students who are damaged by trauma and a higher number of students who are

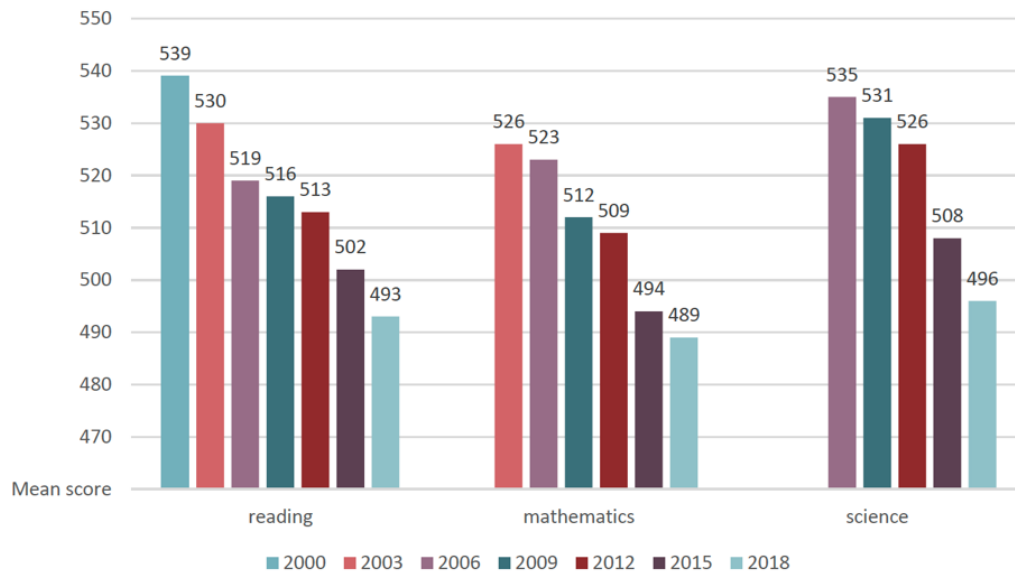
in the foster system or who are being raised by grandparents. The amount of variation or difference between the family environments students come from has increased.”

It was mentioned above that most teachers have noted a steady decline in students’ overall readiness to learn. For example, four out of five teachers in Australia think that students’ ability to focus on educational tasks has decreased during the last three to five years. The same number of teachers have observed that students’ empathy has also declined, and two thirds of teachers have observed decreases in students’ completion of their homework on time. On top of all these behavioural and cognitive challenges almost one third of teachers in this study have noticed an increase in the number of students coming to school hungry. All things considered, teachers are under a new and complex set of challenges in school which significantly affect their ability to do their best as teachers in classrooms unless supportive measures can be put in place soon.

I have witnessed many schools being under pressure to work harder to mitigate the negative impacts of cognitive, social and economic challenges of their children. Annual national assessments (NAPLAN) and examinations (HSC) have become important indicators of the success of schools in recent years. Parents, politicians and media pay close attention to annually released results to conclude how education systems, their schools, teachers and students are performing. Teachers and principals are much less excited about these tests because they understand that standardized tests scores cannot be used to judge the quality of a school or a teacher. But it has become difficult to explain that even when the overall spending in schools have increased since 2000 in NSW, Australia and in most other countries, the key indicators have not improved. OECD’s PISA is often used as an international yardstick to compare education systems’ performance against one another. Figure 5 shows the trends in reading literacy, mathematics and science in NSW as measured by PISA since 2000. Students performance in literacy and numeracy according to NAPLAN since 2009 has not shown progress in NSW.

Another trend within the school performance in Australia and NSW is widening achievement gap between students with different socio-economic backgrounds. In every country in the world more affluent children perform, on average, better in academic achievement tests, such as PISA and NAPLAN, compared to their less-affluent peers. But what is worrying and has direct consequences on teachers and teaching in schools is the increasing size of these gaps. In NSW, according to ACER (2019), the differences between highest and lowest socio-economic quintile in 2018 were 96 points in reading literacy, 89 points in mathematics and 87 points in science which is equivalent to about three years of schooling. This trend is similar in many other OECD countries, not just in NSW and Australia.

Figure 5. NSW 15-year-old students' average literacy, numeracy and science scores in OECD's PISA survey since 2000



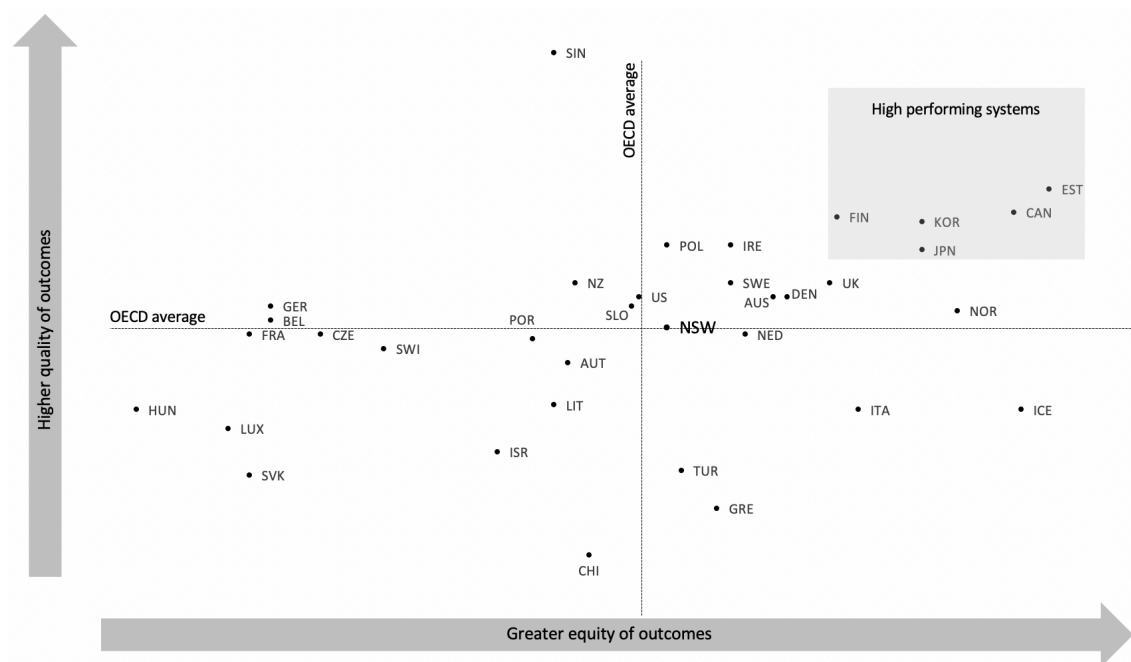
Source: ACER (2019) and NSW Parliamentary Research Service (2020)

In NSW more than 80 per cent of students with special educational needs and 85 per cent of indigenous children attend public school. Moreover, if we keep in mind that about 60 per cent of the variation in students' test scores is related to factors outside the school gate, then most of the opportunities to narrow these achievement gaps are in other public policy sectors than education. NSW schools are not resourced based on their real needs which makes even the provision of sufficient educational services difficult when schools are catering to large numbers of students with special needs. Still, in many cases, teachers and schools are held fully accountable for these declining performances and required to do more to turn the course. Teachers need to be held responsible for their professional duties at school to parents, students and one another, but they should not be held accountable for something that is beyond their reach.

C Inequalities, digital divide and the teaching profession

Research and comparable international data since 2010 have led to the following bold conclusion: The most successful education systems are those that give high priority to both equity and excellence in education policy and school improvement. Indeed, high performing school systems in Canada, Finland, Estonia, South Korea and Japan show strong overall student learning outcomes and system-wide equity simultaneously. As mentioned earlier, Australia's performance in these comparisons has been declining regarding student achievement and equity of these outcomes. Figure 6 illustrates the situation across the OECD countries in quality and equity of education outcomes in 2018.

Figure 6. Relationship between quality and equity of education outcomes in NSW and the OECD countries in 2018



Source: Sahlberg (2020) and OECD (2019a)

Students’ socio-economic background explains a big part of their performance in school. Internationally, child poverty rates are strongly related to income inequality. Research also suggests that in more equal societies people are healthier, happier, less stressed and do better in education compared to those living in more unequal countries (Wilkinson & Pickett, 2009; 2018).

According to our research, teachers believe that students living in poverty, as well as male students, have been most severely negatively impacted by the explosion of digital media and technologies. In fact, 64 per cent of Australian teachers believe that socio-economic factors get in the way of families being able to meet the Bring Your Own Device (BYOD) policy at the school. Over 80 per cent of teachers think that students’ socio-economic background has some impact on their access to technology they need for learning in school, and almost half of these teachers believe the impact is considerable.

Socio-economic inequalities which are often the root cause of educational inequities are perhaps the most important single factor affecting the teaching profession in NSW today. Hence, teachers in many schools are dealing with a twin challenge in their daily work: How to address increasing inequalities through teaching and how to help the growing number of students with a wide range of complex emotional, social and cognitive difficulties.

Despite being one of the wealthiest countries in the world, not all Australians are living in a digital world with portable gadgets and internet connection. According to recent data (Watt 2019), only about 87 per cent of Australians have access to the internet at home meaning that over two million people are partially or fully excluded from the daily benefits of the online digital world. Furthermore, about 10 per cent of 5- to 14-year-olds who live in

more affluent communities don't have access to the internet compared to one third of their peers who live in disadvantaged homes. The Melbourne-based Mitchell Institute (Noble, 2020) estimates that up to one third of lowest income households don't have access to the internet at home which presents a serious risk for children learning from those homes. This has become a visible phenomenon during the global COVID-19 pandemic when schools in NSW went to remote emergency mode for several weeks in the half of 2020.

It was already evident prior to the pandemic that schools are different in terms of their readiness and capacity to support students' learning from home by technology. The OECD's latest PISA survey in 2018 showed that only two thirds of 15-year-olds across OECD countries, on average, attend schools where the school principal considers that teachers have the necessary technical and pedagogical skills to integrate digital devices in instruction (OECD 2020). It is noteworthy also that there is a considerable variation between socio-economically advantaged and disadvantaged schools in this respect. In Australia, similar to OECD countries on average, two-thirds of 15- year-olds are enrolled in schools where teachers are ready for integrating digital technologies in their pedagogy. But 80 per cent of students who were in advantaged schools (compared to just 50 per cent of their peers in disadvantaged schools) had teachers who were ready and able to integrate digital devices in teaching, which is one of the biggest gaps in all OECD countries.

There is an additional factor caused by the COVID-19 pandemic that negatively affects lives of hundreds of thousands of NSW children. The current pandemic and its sudden impact on the national economy has left tens of thousands of parents in NSW jobless since April 2020 and many more have seen their working hours slashed (Australian Bureau of Statistics, 2020). This has brought extra stress and anxiety for numerous families and it often jeopardises parents' efforts to support their children's learning from home. In June 2020, right after the first wave of the COVID-19 pandemic and several weeks of remote learning for most NSW children, the Australian Academy of Sciences concluded that the educational outcomes for many vulnerable children will almost certainly go backwards. Particularly Aboriginal and Torres Strait Islander students are at risk and "likely to face particular challenges with remote learning related to a lack of internet service and device availability, reduced opportunities for interaction with Indigenous teacher assistants, and the challenge of incorporating culturally appropriate pedagogies into online resources", the report states (Australian Academy of Sciences, 2020).

The final verdict on the negative and in some cases positive consequences of the COVID-19 pandemic on Australian children and their teachers has to wait for more systematic research and analysis. Early results from a large nationwide survey by University of Sydney of 10,000 teachers in April reveal that 80 per cent of teachers felt that they were not prepared for the transition from school-based teaching to remote online learning from home (Wilson, MacGrath-Champ, & Mude, 2020). Only a quarter of teachers believed that their students were learning well in remote settings and just 43 per cent were confident that most of their students were positively engaged with learning from home. The silver lining in the COVID-19 pandemic is that in many countries it has become clearer now what serious negative implications educational inequalities can have on teachers and the quality of education and why it is important that we fix these inequalities as soon as possible.

D Recommendations

It has hopefully become clear that the teaching profession is facing considerable challenges from more directions than one. Teachers in NSW work longer hours than before. They are teaching more diverse students in their schools who have different values, expectations and needs from one another. They also teach students who come to school every day with a wide range of challenges that often make productive teaching and learning possible. And teachers also are under growing pressure to fix the dysfunctional aspects of the current school system. As a consequence, teachers are tired and even burnout to the point that many want to leave the profession to avoid further personal harm.

It is paramount to find out fast and effective ways to improve the status of the teaching profession in NSW and Australia. Any suite of possible solutions understandably must contain short-term interventions that are about to have immediate impact on teachers and teaching. Then there should be actions that are directed more towards improving the education system and its sustainability. The following five recommendations are about to give this important process a strong start.

1. Comprehensive public policy reform to address current and emerging inequalities in education

International evidence suggests that good overall learning outcomes are often achieved in more equitable education systems. Inequity in education that means that variation in student learning outcomes at school are strongly related to family background, especially parents' education, occupation, and their position in society. Schools can't change these socio-economic inequalities and make education more equitable without targeted support and investments by Governments. It is important that education policies, including school funding principles, systematically address current inequalities in NSW school education. Again, international examples suggest that building stronger equity in the education system requires that all children have access to high quality early childhood education and care, all schools are provided with facilities and specialised personnel to work with children with special education needs, managing school choice so that it doesn't negatively affect the work of schools, and establishing preventive wellbeing and health structures and services in all schools. Greater equity in NSW schools would have immediate and direct positive effects on the teaching profession and teaching in schools.

2. Strengthen the engagement and voice of the teaching profession in policy development and implementation

A key feature of any world class education system is public recognition of teacher professionalism, in other words, that teachers and school principals are skilled professionals akin to medical doctors, lawyers, architects and engineers. There is a strong positive relationship between high school system performance and the level of professionalism of teachers. Important aspects of professionalism include both rights and responsibilities of professionals to planning, decision-making and evaluation of their work and duties. All successful education systems currently have adopted ways in which teachers and principals can actively engage in developing education policies and reforms,

and they also provide teachers opportunities to use their voice and experience in public conversations. In NSW that is not possible. One effective way to improve the status of teachers is to strengthen their engagement in policy development and implementation by enhancing teacher and principal agency in matters that concern their work at school.

3. *Restructure daily schedules in schools to make more time for teacher collaboration and learning*

Teachers are knowledge workers who increasingly engage in complex communication, diverse collaboration and creative problem solving in their daily work with children and adults. In high performing teaching cultures teachers are expected to perform beyond the traditional role of teacher as ‘deliverer’ of curriculum towards active co-creator of alternative solutions and productive learning environments. In these school cultures teachers are empowered by giving them time to work with one another regularly during school days. It is very unlikely that teachers can become more effective and, as a consequence, schools would get significantly better unless they have time collaborate more. Teachers in NSW work long hours at school and add more on their weekly workload by working at home. The status of teachers as real professionals can be improved by reducing teachers’ and principals’ administrative duties and by transferring that time to teacher collaboration and learning.

4. *Invest in pedagogy before technology*

Technology is important part of teaching and learning but it is not the most important part of successful teaching or high performing education systems. Technology can only be as good as the people who use it. All world class education systems have understood this and accepted that investing in teachers’ knowledge and skills about teaching and learning, or pedagogical thinking, has much greater returns than spending funds in equipment and software that teachers don’t know what to do with or don’t want to use in the first place. Contemporary research on improving quality of teaching and teacher efficacy in schools suggests that the best investments in pedagogy happen by investing in people through social capital, in other words by providing schools and teachers new opportunities network, share ideas and collaborate. A lot of resources are already spent in NSW on educational technologies and professional learning of teachers but often with modest or no gains in students’ learning outcomes.

5. *Build public confidence in public schools and trust in teachers*

Demand on teachers is high and getting higher. Teachers are more often expected to do tasks that are not in their job description. They are responsible for teaching solid basic knowledge in literacy and numeracy and at the same time provide all students with “21st century skills” to better navigate in uncertain world. As has been presented above, teachers are supposed to take care of students’ individual differences and needs. Whenever these expectations fall short, the blame is most of the times on teachers. No wonder that more than three out of five teachers in Australia feel that the teaching profession is not valued in society. It is paramount that confidence in public education and trust in teachers as professionals be reinstated in NSW sooner rather than later. High

performing education systems, such as Ontario, Alberta, Singapore and Finland, have made systematic efforts to raise the status of the teaching profession and thereby to strengthen it. In NSW this cannot be left to the NSW Teachers Federation alone. It requires collective action led by teachers and education authorities. Strong public education system is the best guarantee for the future where teaching is seen as dream job for more young people than before.

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