Independent Schools Queensland
choice & diversity

A Catalyst for Change

OUR SCHOOLS – OUR FUTURE
ISSUES PAPER
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Prepared by
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THE UNIVERSITY OF MELBOURNE

CONTENTS

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ABOUT THE AUTHORS

Professor Jim Watterston

From his first job as a teacher in a rural Indigenous classroom in his home state of Western Australia to his appointment as the Dean of the Melbourne Graduate School of Education at the University of Melbourne, Professor Jim Watterston brings more than 35 years of successful experience across a diverse range of educational roles and sectors.

Jim spent his first ten years in the profession as a teacher before being promoted to the position of principal in a range of primary and secondary schools. He then progressed to the role of Regional Director in WA and Victoria before he was appointed as the Deputy Secretary of the Victorian Education Department, and Director General of both the ACT and, most recently, Queensland Departments of Education and Training. Jim was awarded a Doctorate in Education at the University of WA in 2004.

In addition to appointments to many educationally related Boards, Professor Watterston has previously served for six years as the National President for the Australian Council for Education Leaders, and is recognised as an influential advocate for the education sector. His contribution to education has been acknowledged both nationally and internationally with awards from a number of professional bodies and educational institutions including the highly prestigious Order of the Palmes Académiques (Chevalier) by the French Government in 2014 for a distinguished contribution to education.

Professor Yong Zhao

Dr Yong Zhao is a professor in Educational Leadership at the Melbourne Graduate School of Education in Australia and a Foundation Distinguished Professor in the School of Education at the University of Kansas. He previously served as the Presidential Chair, Associate Dean, and Director of the Institute for Global and Online Education in the College of Education, University of Oregon, where he was also a Professor in the Department of Educational Measurement, Policy, and Leadership. Prior to Oregon, Yong Zhao was University Distinguished Professor at the College of Education, Michigan State University.

Yong Zhao has received numerous awards including the Early Career Award from the American Educational Research Association, Outstanding Public Educator from Horace Mann League of USA, and Distinguished Achievement Award in Professional Development from the Association of Education Publishers. He is an elected member of the National Academy of Education and a fellow of the International Academy of Education. He has been recognised as one of the most influential education scholars.

His works focus on the implications of globalisation and technology on education. He has published over 100 articles and 30 books.

OUR SCHOOLS – OUR FUTURE

Our Schools – Our Future is an Independent Schools Queensland (ISQ) research-based initiative designed to promote informed public policy debate about schooling. Through commissioned and internal research, Our Schools – Our Future explores trends and issues in key areas which determine the nature and performance of our school education systems. While the initiative has a particular focus on the contribution of independent schools to our education provision and outcomes, it examines a range of issues and trends relevant to the development and implementation of effective public policy for schooling. All research reports are available to members on the ISQ website.

DISCLAIMER

Independent Schools Queensland commissioned this paper to Professors Watterston and Zhao. The authors accept full responsibility for the views expressed herein. ISQ does not necessarily support all of these views.

Cover image: The Springfield Anglican College

Foreword

The global COVID-19 pandemic has changed the way we live, work and learn.

Queensland schools fell unnaturally silent when learning moved from the classroom to the family dining room for the first half of Term 2, 2020.

Our political leaders were adamant education would not be a casualty of the pandemic.

School leaders and teachers responded by working tirelessly to maintain student learning remotely.

Independent schools, in particular, used their unique autonomy to pivot quickly, to build on strategic investments in learning and communications platforms, and to draw on their strong partnerships with parents and carers to keep students learning and their communities connected.

Independent Schools Queensland (ISQ) commissioned respected University of Melbourne academics Professor Jim Watterston and Professor Yong Zhao to consider the future of schooling and the positive opportunities for change as a result of the pandemic.

The professors identified six key areas for transformation: the purpose of schooling; the curriculum; assessment; student agency in learning; digital literacy and the role of the teacher.

A Catalyst for Change is the latest in a series of thought-provoking papers on contemporary education challenges and policy questions commissioned by ISQ as part of its Our Schools – Our Future program. This latest paper builds on previous releases including, *Queensland's Education Future: Continuing the Reform Agenda* and *Leading Curriculum Innovation: A Discussion Paper*.

It has been 18 years since Queensland embarked on its last comprehensive reform of school education, the 2002 *Education and Training Reforms for the Future*. Since that time how we connect, socialise & learn has been altered and influenced by developments such as the iPhone (2007), iPad (2010), YouTube (2005), Facebook (2004) and improved internet speeds and artificial intelligence. Are existing legislative and regulatory frameworks governing school education contemporary and flexible enough to enable innovation to occur? Are they reflective of our contemporary understanding of the role of the school, teacher and learner, as well as how, when and where learning can occur?

I encourage you to read *A Catalyst for Change* to form your own views and consider whether there is sufficient momentum and will to debate and answer these critical questions.

DAVID ROBERTSON

EXECUTIVE DIRECTOR
INDEPENDENT SCHOOLS QUEENSLAND

Executive Summary

The COVID-19 pandemic continues to cause global disruption to almost all aspects of human life. One of the most affected areas has been the ongoing delivery of education. The impact of a range of societal restrictions has seen changes in education delivery, with numerous schools moving online or providing external home-based learning materials. We argue in this paper however, that such changes have essentially been short-term, temporary measures to deal with the need for social isolation in order to prevent the spread of the virus. While we have celebrated the effort and innovation of our teachers who have rapidly made the necessary changes to education delivery, we take the view that they have not been significant enough to become the basis for post-COVID-19 educational reform or as many claim, *the new normal*.

Across Australia, our educational outcomes were problematic before COVID-19, but the one incredible educational revelation that has been observed during this challenging time has been that when all staff are engaged and there is a compelling reason, we can collectively change the traditional schooling experience, for better or worse, virtually overnight.

In this paper, we identify six significant changes (see page 3) that we believe must be collectively addressed in order to create the contemporary and fit-for-purpose schools that every child is entitled to attend. We need to use the new-found COVID-19 inspired capacity of the profession to take ownership and implement the reforms that were required long before we had to adapt our thinking to the challenges of a pandemic. We believe this is a unique once in a lifetime chance to make radical changes and we are firmly of the belief that the Independent school sector, free of the systemic constraints in other sectors, is well placed to lead the nation in this quest.

The Six Significant Changes

1

Rethinking Outcomes: The Purpose of Schooling

Traditionally valued skills and knowledge have and will continue to become less important as a whole set of new capabilities become more important. This set of skills in general, includes creativity, curiosity, critical thinking, entrepreneurship, collaboration, communication, growth mindset, resilience and cultural literacy. For humans to thrive in the age of smart machines, it is essential that they do not compete with machines. Instead, they need to focus on what it means to be more human. The traditional role of schooling was to prepare students, based on aptitude, for a job but in a rapidly changing world beset with emerging challenges we need to prepare our students for a world without certainty.

2

Rethinking the Curriculum: Improving Accessibility and Creating Space

The ongoing Australian Curriculum Review is welcome news, but it needs to go further. There needs to be a greater ease of accessibility for teachers in terms of translating curriculum framework requirements that address the challenging integration of discipline-based learning, general capabilities and cross-curriculum priorities. It could be that the 'existing structure' of the Australian Curriculum might well be the root of the problem and should also be up for review. We need to make the curriculum less demanding for teachers and provide resources that leave more time for the art of brilliant teaching.

3

Rethinking Assessment: Measure What Matters

What we measure becomes a priority which then distorts curriculum implementation as our schools get measured by those priority driven results. Think NAPLAN and the ATAR. We need to take seriously the measures of skills that will be important for young people in a complex world. A number of adventurous schools are leading the nation by moving to more meaningful and warranted Learner Profiles for graduating students. Such rigorous Learner Profiles provide a broad perspective of well-rounded individuals who are much more than just an ATAR comprised of four or five subject scores derived from an archaic assessment regime built on competitive and outdated high-performance testing.

4

Rethinking Learners: Self-determination, Autonomy, Agency, and Voice

Learners should be more actively engaged in their own learning. To promote student self-determination as both a self-evident, naturally born right and an effective strategy for enhanced learning, we need to consider enabling students to make decisions regarding what to learn. Schools should use discretion to start relaxing the intense requirements of curriculum. Schools could start by allowing students to negotiate part of their curriculum instead of requiring that all students learn the same content. Students should be enabled to have certain levels of autonomy over what they want to learn, how they learn, where they learn and how they want to be assessed.

5

Rethinking the Basics: Digital Literacy

Gallantly pivoting to shift learning online forced many educators and parents to face one of the biggest challenges in education today: preparing and assisting students to live well in the digital world. Today's youth spend more time in the digital world than in school, but they enter the digital world largely on their own, with little intentional education about it from schools. Schools have been asked to prepare their students to use digital technology responsibly, productively, and safely, under the very large umbrella of 'digital literacy'. The digital world is multi-dimensional: psychological, social, emotional, cultural, spiritual, economical, technological, behavioural, and of course cognitive. To fully prepare our young people to live successfully in the digital world requires our education institutions and parents as partners to have a different view of this world and dedicate resources and time to develop an education that helps students learn to learn, socialise, work, and live wisely, productively, and responsibly the same way as we prepare them for the 'real' world.

6

Rethinking Teaching and Teachers: Creating Options for Students

Teachers have traditionally been the primary source of knowledge for students and their primary role has therefore, been to instruct. Teaching however, can be different and so can the teacher's role. Given the fact that students can learn through ubiquitous access to learning resources, teachers should consider opportunities to co-create learning events and processes with parents and students to support students to use technology and other means such as peer tutoring to learn. They work to create more options for students to learn. Their role changes when they don't always teach by leading from the front. They can be the curators of learning resources, manager of student projects, more relational, a personal consultant and advisor to students, and leaders of learning communities organised by students.

Introduction

As 2020 dawned across the globe, we have been confronted with unparalleled disruption in almost every facet of our existence due to the emergence of the COVID-19 pandemic. From an education perspective, teachers and administrators throughout the world had to innovate and adapt to ensure that institutionalised learning could continue despite the immense challenges faced due to rapidly imposed societal restrictions, including the closure of many workplaces, services and schools.

Suddenly, and without time to fully plan and debate, across Australia we shifted the majority of the nation's four million school students from a mostly place-based, face-to-face learning environment to an external and remote delivery of learning and school participation. It thrust educators into the spotlight as commentators and parents, lauded the efforts of front-line essential service-providers who rapidly designed and implemented programs that attempted to sustain learning and connection. The status of teaching and teachers in particular, at least in the short term, have seemingly been elevated to a level of acclaim that many would argue, has not been appreciated previously.

While this paper is not focused purely on the Australian pandemic response which continues to emerge and develop, there are already some clear learnings and observations that reinforce to all of us that there are aspects of our educational practice that we need to rethink and transform. The paradox, however, is that we should not have actually had to experience the chaos of the pandemic to create the case for change. We did not require an existential crisis to tell us that we needed to do better. Our national and international student performance data has been 'screaming' at us for more than a decade highlighting that student outcomes, from a population perspective, are not improving, and in some areas, are actually getting worse.

In addition to our plateaued academic performance, recent data indicates that our current generation of students are not as fit or healthy as they were in previous decades and the prevalence of student wellbeing and mental health issues continue to emerge as prominent issues for teachers to address as they grapple with improving outcomes. Emerging evidence warns us that health and anxiety related issues will be exacerbated by the impacts of the pandemic in addition to other recent crisis events experienced around the country. While it can be argued that remote learning may not have been successful for all students, nor has the traditional 'assembly-line' schooling approach that has long been in place prior to COVID-19.

But could it be different this time? Will the education related experiences and learnings from this pandemic be the 'burning platform' that we need to depoliticise and refocus the reform and restructuring of archaic elements of our school education systems? Well, if one was to assemble the recent and rapidly growing proliferation of educational articles, interviews and quickly cobbled quasi-research from supposed experts about the 'new normal' in education that we can expect, then we should feel optimistic that such a devastating and ongoing event will have a long lasting and positive impact.

If, however, the conception of change is about using digital devices for 'blended' delivery to students and for more efficient parent-teacher and staff meetings then we run the risk of the 'new normal' delivering a dressed-up version of the deficient 'old normal'. The inconvenient truth might be that the notion of seeking any form of 'normal' in education is what has been holding us back for so long. Our schools need to create an environment where every child is unique

Montessori International College

Ormiston College

and where personalised programs are focused on the strengths and weaknesses of the individual. The concept of normal, old or new, may well be the enemy of innovation and real improvement. Based upon our consistent past practice, it is hard to feel confident that any 'new normal' post the pandemic will be all that different from the 'flatlining normal' that we have become so accustomed to over previous decades.

While teachers across Australia are to be congratulated and thanked for their outstanding efforts and ingenuity during the period of alternative external delivery, research is emerging that identifies in many schools that the teaching practices and pedagogies employed and the quality of student engagement during this period has, understandably, been less effective in comparison to the 'old normal' face-to-face equivalent.

There is, however, a fundamental lesson to be learned from the pandemic which gives us hope and cause for optimism. Without doubt, the most important learning from our recent external learning delivery experience is that if all staff are engaged and there is a compelling reason, then we can change the traditional schooling experience, for better or worse, virtually overnight. Our teachers were collectively motivated to 'move mountains' because there was no doubt that it was the right thing to do. Teachers innovated and worked on contextualised issues in a galvanised attempt to bring about suitable local responses.

This paper is focused on the big and unresolved educational issues that existed prior to COVID-19, but as Churchill purportedly said during the second world war, "Never let a good crisis go to waste". We should therefore use this moment while there appears to be a willing and motivated coalition emerging, to do what we should have done already. The pandemic has exacerbated the fact that we need a more contemporary and relevant education system that will better prepare our students for a very different life to that experienced by previous generations. More of the same, for most, will not cut it. The uncertainty of COVID-19 could be the catalyst for governments, education leaders, school principals, and teachers to embark on a journey to think about, redesign, and take positive actions in relation to the future of schooling. Whatever the future will be like, the most recent actions prove that schools can change, and educators can be change makers.

COVID-19 changed schools but it is not and should not be the reason that schools change. It was an unplanned and unexpected situation where educators were forced to immediately respond. What the future will be like is not a question for observers. We, as educators, cannot stand aside making predictions. Instead, we need to intervene, to argue for, and to develop that future. The changes resulting from COVID-19 were in many ways haphazard. They were quite often emergency handling and quick responses created to address the crisis. But now we have the opportunity to reconsider what changes we want and need to have in our schools. It is time to seize the moment.

The Broad Contexts

To understand the changes we want, we need to think about the broad forces shaping society because education, particularly K-12 education, is preparing our students for a complex and challenging future that provides no guarantees. How society changes directly affects how K-12 students will live and work in the future. While predicting the future is the work of others, for educators the essential task is preparing our next generations for whatever they may encounter in the future with relevant knowledge, skills and know-how. It is also important, however, to pay attention to the children who actually contribute to that future because who they become also affects that future. In other words, the future is the co-evolutionary consequence of education and the human society. Hence the discussion about the contexts in which we should consider educational change should be about both the driving forces affecting human society and the fundamental nature of the students.

Changing Forces

There are many forces changing society. Chief among the influences that are and will continue to have a significant impact on education are: the pervasiveness of the Fourth Industrial Revolution; the existing and further expansion of globalisation; and the potentially devastating environmental changes that will impact on all aspects of life.

THE FOURTH INDUSTRIAL REVOLUTION

Technology has driven human changes throughout history. The accelerating and culminating advances in technology are very rapidly forcing human beings into the Fourth Industrial Revolution (Coulibaly, 2020; Schwab, 2015; World Economic Forum, 2016). This is a most powerful force that is shaping and will continue to shape education. Artificial Intelligences, Machine Learning, Big Data, Internet of Things, Cloud Computing, together with the fusion of the digital, biological, and physical worlds and other related technological changes are already creating unprecedented changes in how we live, work, and play.

Its impact on education is on two fronts. First, the skills and knowledge that individuals will need to thrive will be drastically different from what schools teach today (Wagner, 2008; Wagner & Dintersmith, 2016; World Economic Forum, 2016). Second, resources and effective modes of teaching and learning have evolved, and that evolution continues to gather rapid pace.

THE GLOBALISED WORLD

The world has become increasingly globalised (Friedman, 2007; Stiglitz, 2006) and this expansion has not impacted equally well on everyone and on all countries. The interdependency of economies has created opportunities for many and problems that have negatively affected the lives of others. Tectonic issues such as the current pandemic,

continue to test the perceived benefits and opportunities of globalisation, however, it is unlikely that globalisation will, or actually could, unwind. Instead, globalisation needs correction and reconfiguration. That correction and reconfiguration needs people who actually understand globalisation and how to live globally. The globalised world thus presents two big challenges for education.

First, education needs to prepare members of communities that are local, national, and global. Second, it further needs to prepare people to correct and reconfigure globalisation and interdependency for the ongoing benefit of all individuals on this planet.

ENVIRONMENTAL CHANGES

The environment human beings live in, that is, the earth, has been changing and according to most available evidence, becoming worse. Global warming, environmental degradation, biodiversity loss, and ecological crises are affecting all human beings. How emerging generations will collaboratively react and respond to these changes to create a sustainable environment should be yet another major concern for all schools. From an education perspective, dealing with global environmental existential challenges provides two imposing challenges.

First, evidenced based sciences must be prioritised as core learning across the K-12 curriculum for all students. Second, all schools need a comprehensive and proactive approach to student and staff mental health and resilience as significantly increased anxiety and wellbeing issues continue to emerge and impact on learning and life trajectories.

The Learner and Learning

The students who are entering schools this year were born after 2014, when digital technological advances and globalisation have been well underway. This generation, Generation Alpha (Pinkser, 2020), are growing up in an environment drastically different from previous generations, including the majority of their teachers. While we are not certain what they will become, it is certain that they are growing up with accelerated access to technology, greater diversity, globalisation, and massive environmental and social changes, including the current COVID-19 pandemic that has unexpectedly, and in various ways, altered the life trajectory for most.

Our understanding of the learner and the learning process has dramatically increased thanks to advancement in neuroscience, learning sciences, psychology, and other disciplines. We know that children are active, curious, and creative learners who learn best through social interactions. Learning needs to be purposeful, relevant, and meaningful. (National Academies of Sciences, Engineering, and Medicine, 2018).

It is, therefore, incumbent on all educators to use this evidence base more effectively to enhance and maximise learning opportunities for all.

Reforms in the Past

Education reforms over the past decades, characterised by curriculum centralisation and standardisation, test-driven accountability, and school marketisation (Sahlberg, 2012) as the way to close the 'achievement gap' and raise test scores in international assessments, have generally failed. Judging from test scores, domestic and international, it is difficult to see significant improvements in either closing the achievement gap or raising educational quality, as measured by traditional testing. In the meantime, due to changes in technology, increasing demands for education to pay greater attention to other domains such as social and emotional learning, civic responsibility, creativity and entrepreneurship, global competence and cross-cultural abilities, as well as digital competence and media abilities have been on the rise (Zhao, 2018a). These emerging demands have, however, been practically placed on the margin, with most of schools' attention focused on improving literacy and numeracy.

Australian Youth

The broad contextual changes have already brought impact on Australians. A recent report by the Department of Education Skills and Employment acknowledges the "consensus among those with a knowledge of youth affairs that young people were having an increasingly tough time even before the COVID-19 pandemic" (The Department of Education Skills and Employment, 2020). The unprecedented high levels of educational attainment have not resulted in better school to workforce transition for Australian youth. "Even the most educated of young Australians can have difficulty finding secure work and those with lower attainment struggle more than ever to get a foot in the door," says the report. Australian youth experience delayed financial independence, which then keep the youth in the family home longer. The result is increased stress. "Financial and psychological stress have been increasing amongst youth" in Australia (The Department of Education, Skills and Employment, 2020). To build a better future for Australian youth, education must change its directions instead of simply adding more attainment.

So, What Changes Do We Need?

Given these contextual factors, we think big changes can and should happen in a number of key domains in education. These changes may not be necessarily new, but they are pivotal to changing the traditional education paradigm that is no longer suited to challenges that we face. Many have called for them before, but in 2020 and subsequent years, we think they are vital to the future success and satisfaction of our students. Importantly, we should embrace the moment and use the emerging platform of the COVID-19 pandemic to leverage the opportunity for proactive change.

1

Rethinking Outcomes: The Purpose of Schooling

Schools in any society serve multiple purposes for different people, but in terms of students, the most important is outcomes. That is, what should children become? What should they know and be able to do when they graduate? What attitudes, capacities, and mindset should they develop?

It has been widely acknowledged that to thrive in the future, in the globalised Fourth Industrial Revolution, traditionally valued skills and knowledge will become less important and a whole set of new capabilities will become more important (Barber, Donnelly, & Rizvi, 2012; Florida, 2012; Pink, 2006; Wagner, 2008; Wagner & Dintersmith, 2016). While the specifics vary, the general agreement is that repetition, pattern-prediction and recognition, memorisation, or any skill connected to collecting, storing, and retrieving information are in decline because of AI and related technologies (Muro, Whiton, & Maxim, 2019). On the rise is a set of skills that have many different names such as 21st century skills, soft-skills, core competencies and non-cognitive abilities. This set of skills include creativity, curiosity, critical thinking, entrepreneurship, collaboration, communication, growth mindset, and a host of skills with different names (Duckworth & Yeager, 2015; Zhao, Wehmeyer, Basham, & Hansen, 2019).

Somerville House

Redeemer Lutheran College

Importantly, individuals need to become different from each other rather than homogenous because of smart machines (Zhao, 2012, 2018b). Automation has already displaced millions of workers and the Fourth Industrial Revolution will result in even more displacement. For humans to thrive in the age of smart machines, it is essential that they do not compete with machines. Instead, they need to be more human. In an AI world individual creativity, artistry and humanity will be important commodities that distinguish us from each other.

Being unique and equipped with social-emotional intelligence are distinct human qualities that machines do not have (yet) and thus what Tim Cook, CEO of Apple Computers, said is of tremendous value to educators:

"They're worried about machines taking jobs and AI sort of replacing humans. My worry is not that machines will think like people — it's that people will think like machines. And so that to me is a much bigger worry" (Fried, 2018).

Today, schooling is not simply about preparing for employment and ongoing job security. The new skills and competencies are not only needed for work, they are needed for life. As technology improves productivity and enters more into human life, it will be important for humans to learn to live with machines all the time. Moreover, humans will need to dive into humanities and learn to live peacefully with each other across racial, religious, and national boundaries. Schools should no longer be seen and funded as economic levers to enhance GDP. Students don't go to school just to get a job although that's how many including policy makers and governments think in terms of curriculum, assessment, achievement and transition.

In fact, given the rapidity of changes we are already experiencing, it is clear that lifelong careers and traditional employment pathways will not exist in the way that they have for past generations (Deloitte 2016; Hajkowicz et. al. 2012). Education, in the modern era, should be about much more than helping individuals find employment. While helping students develop basic practical skills is still needed, it should also be about development of humanity in citizens of the local, national, and global societies. Education must be seen as a pathway to attaining lifelong learning, satisfaction, happiness, opportunity and contribution to humanity. Schools therefore need to provide comprehensive access and deep exploration of all learning areas across all years in order to enable all students to make informed choices and develop their passions and unique talents.

2

Rethinking the Curriculum: Improving Accessibility and Creating Space

For schools to rethink their purposes, it is necessary for them to have a less restrictive curriculum imposed on them. The Australian Curriculum, according to a significant number of our teachers, is demanding and overcrowded as it requires every minute of school time for delivery. This, of course, makes it very difficult for teachers and students to be creative, engage in deep learning practices and explore personal interests and passions.

In June of this year, the Education Council tasked the Australian Curriculum, Assessment and reporting Authority (ACARA) to review the Australian Curriculum "by refining, realigning and decluttering the content of the curriculum within its existing structure…" (The Department of Education, Skills and Employment, 2020). For many schools and teachers this was great news, but we think it should go further. There needs to be a greater ease of accessibility for teachers in terms of translating curriculum framework requirements that address the challenging integration of discipline-based learning, general capabilities and cross-curriculum priorities. It could be that the 'existing structure' of the Australian Curriculum might well be the root of the problem and should also be up for review.

Conversations with countless teachers reveals, unsurprisingly, that developing integrated curriculum year level plans, unit plans and then lesson plans, along with the development, implementation and marking of formative and summative assessment followed up by reteaching at the point of error for individual students makes the job of teaching incredibly complex. For many, the detailed integrated curriculum and assessment planning along with the identification and preparation of teaching resources and learning aids in addition to the collection and analysis of student data assessment and reporting makes the job almost unsustainable. Great teachers are pedagogical artisans, as they perfect the act of engaging and motivating their students through purposeful relationships and stimulating activities to create a memorable experience and reinforce their learning intentions.

It is beyond time for policymakers to rethink the structure and prescriptive packaging of the Australian Curriculum to ensure that it is less demanding so as to leave more time for brilliant teaching. We also need to include in the curriculum significantly more options for individual students and the space for students to construct elements of their own curriculum. As a result of this prioritisation, student outcomes will improve, and great teachers won't leave the profession for less demanding jobs.

3

Rethinking Assessment: Measure What Matters

Whether we believe it to be appropriate or not, schools and school sectors are acutely assessed by headline measures of student performance and it is doing our students and teachers a great disservice. Unfortunately however, national and international testing (NAPLAN, ATAR and PISA in particular) provides narrow perspectives of student achievement when we have an Australian Curriculum that highlights cross curriculum priorities and general capabilities that we have found difficult, or have been previously unwilling, to measure from a student progress perspective.

It is well past time for empowered schools to take a stand and be brave enough to evaluate, in addition to traditional discipline outcomes, aspects of the key attributes that will matter as the world continues to change. Why don't we also measure resilience, wellbeing, interpersonal skills, citizenship, global competency, cultural understanding, creativity, teamwork, and a host of other skills that would provide a much richer perspective of a person's talents, dispositions and abilities? A number of adventurous schools are leading the nation by moving to more meaningful and warranted Learner Profiles for graduating students. Such rigorous Learner Profiles provide a broad perspective of well-rounded individuals who are much more than just an ATAR comprised of four or five subject scores derived from an archaic assessment regime built on competitive and outdated high-performance testing (O'Connell et al., 2019; Pilcher & Torii, 2018).

It is ironical that for decades Queensland had a well-balanced and contextualised senior secondary assessment regime that was somewhat flexible, future-focused and envied by other jurisdictions up until this year. It now moves to a more inflexible, high stakes regime that stifles creativity and rewards and ranks a set of examination skills that may not be as relevant in a future post-school world. As Queensland enshrines high stakes ranking, conversely, many universities across the nation, as a recognition of the impact of the pandemic on Year 12 students, are providing broader and less restrictive criteria for university entry. Indeed, the importance of a university degree may continue to shift as we move forward, with the advent of progressive and more meaningful assessment changes and the increasing sophistication of micro-credentialling for so called 21st Century skills.

4

Rethinking Learners: Self-determination, Autonomy, Agency, and Voice

Learners should be more actively engaged in their own learning. There are different views and arguments about what that involvement should be. There are also different terms that have been used in the literature (Wehmeyer & Zhao, 2020), but the overall notion is that students should play an increasingly more significant role in their own learning.

The reasons for students to take a more significant role in their own learning are multiple. First, students are diverse and have different levels of abilities and interests that may not align well with the content they are supposed to learn in the classroom. To help students, teachers have been encouraged to pursue classroom differentiation (Tomlinson, 2014). At the same time, students have been encouraged to play a more active role in defining their learning in collaboration with teachers. Second, the recent movement toward personalised learning (Kallick & Zmuda, 2017; Kallio & Halverson, 2020) needs students to become more active in understanding and charting their learning pathways. The third reason is that students should not only be active in making decisions in their own learning in the classroom but also in other aspects of their learning such as the school environment. Some schools have the long tradition of having a few students participating in processes that affect the school environment, but the need for the roles of students to go beyond tokenistic is on the rise.

There is, however, another level of student engagement that has arguably not received sufficient attention. While in traditional arguments for student voice, agency, and personalised learning (Cook-Sather, 2018; Gonzalez, Hernandez-Saca, & Artiles, 2017; Kallick & Zmuda, 2017; Moses, Rylak, Reader, Hertz, & Ogden, 2020; Taub et al., 2020), the emphasis has been on allowing and enabling students in making decisions about the process of learning: the when and how of learning. Little possibility exists for students to decide what to learn beyond the prescribed curriculum. With students working from home during the COVID-19 period this year, a number of schools have reported challenges and instances of waning engagement from some students which were addressed by providing greater agency to both students and parents/carers in regard to curriculum choices and learning tasks. Now is a great time to further empower students to be the architects of their learning and achievement.

To promote student self-determination as both a self-evident, naturally born right and an effective strategy for enhanced learning (Wehmeyer & Zhao, 2020), we need to consider enabling students to make informed decisions regarding what to learn. This generation of learners are much more active and tech-savvy. They have access to information instantly and have been doing so in their daily life. They have different strengths and weaknesses. They also have different passions. Thus, schools should use discretion to start relaxing the intense requirements of curriculum. Schools could start by allowing students to negotiate part of their curriculum instead of requiring all students to learn the same content. Students should be enabled to have certain levels of autonomy over what they want to learn, how they learn, where they learn and how they want to be assessed.

Student self-determination can also exist as a member of the school community. The entire school is composed of adults and students, but students are the reason of existence for schools. Thus, schools and everything in the school environment should incorporate and serve the students. While undoubtedly it is emerging in proactive schools, most schools do not have policies and processes that enable students to participate in making decisions about the school – the environment, the rules and regulations, the curriculum, the assessment, and the adults in the school. To begin with, schools need to create the conditions through empowering students to have a genuine voice on parts of how they operate, if not in its entirety. Students' right to self-determination implies that they have the right to determine under what conditions they wish to learn. Thus it is not unreasonable for schools to treat students as partners of learning and of change (Zhao, 2011, 2018b).

5

Rethinking the Basics: Digital Literacy

Appropriately, literacy and numeracy have dominated as the basics in schools for a long time. There is little resistance to the notion that literacy and numeracy remain as essential skills for every student, however, as has been demonstrated during the COVID-19 period, there are additional 'basic' skills that need to be considered as fundamental for learning and life.

Moving online has been one of the most frequently chosen options for delivering education during the COVID-19 pandemic. Gallantly pivoting to shift learning online forced many educators and parents to face one of the biggest challenges in education today: preparing and assisting students to live well in the digital world. While there is no agreed or explicit description of what the digital world is, the 'digital world' is generally used to mean a world where digital technologies play an important role in human experiences. In the digital world, all aspects of human activities are affected, enabled, and mediated by digital technologies.

Today's youth spend more time in the digital world than in school (Zhao, in press) but they enter the digital world largely on their own, with little intentional education about it from schools. For a number of reasons, many schools have not considered preparing students to live in the digital world as an essential and integral part of their mission. Although schools have a long history of offering courses related to technology under various different titles, these courses may teach students how to use technology and issues such as online safety and responsibility, but rarely do they teach students how to live in the digital world. Furthermore, technology related courses are rarely considered as part of the core curriculum and often given much less time than the core subjects.

The majority of the 'digital world' empirical studies reported today are typically non-interventional and naturalistic in the sense that the participants did not receive educational preparation for living in the digital world. Furthermore, because of the 'newness' of the digital world, there has not developed sufficient widespread cultural norms that students can naturally acquire as part of growing up. Moreover, because most activities in the digital world takes place on screen, which is private, students do not have the experience to observe and imitate how adults engage in digital life; socialising, entertaining, learning, and working. As a result, students have not had sufficient intentional and common preparation for the digital world to mediate the quality of experiences. Consequently, how individuals experience the digital world is largely determined by their own individual preparedness and contexts.

Schools have been asked to prepare their students to use digital technology responsibly, productively, and safely, under the very large umbrella of 'digital literacy.' Although definitions of digital literacy, or its multiple variants such as information literacy, technology literacy, or digital competency, vary a great deal, they all commonly view technology as a tool to enhance learning and living in the 'real' world; the offline, physical world. They all fail to recognise that the digital world is indeed a different world from the physical one, the one we are familiar with. The digital world can be viewed as a "foreign culture that we must interact with" (Zhao, 2009, p. 129). This foreign culture, like any foreign culture, has some similarities with our own, because we all are human beings. However, it is sufficiently different that we cannot treat it as the same hence the need to consider a focus on 'digital wellbeing' as we negotiate online ecosystem. We cannot assume that because we know how to function in our own culture, we will be able to function effectively in the foreign culture.

Viewing the digital world as a foreign culture highlights the multi-dimensionality of the world: psychological, social, emotional, cultural, spiritual, economical, technological, behavioural, and of course cognitive. Living in the world is much more than cognitive activities and thus should require much more than learning how to extract information from this world. To fully prepare our young people to live successfully in the digital world requires our education institutions in partnership with parents to have a different view of this world and dedicate resources and time to develop an education that helps students learn to learn, socialise, work, and live wisely, productively, and responsibly the same way as we prepare them for the 'real' world (OECD, 2013).

Reports from across the country during the COVID-19 home schooling period have not just been about enhanced respect for teachers, as many principals have reported that teaching staff have also gained a greater appreciation for the roles of parents and caregivers who have diligently facilitated and supported student learning during periods of lockdown. The notion of teachers and parents working together as partners in learning is particularly relevant both within, and outside of the school to ensure that students can successfully negotiate and thrive in the digital world. Parents and schools should collaboratively support and demonstrate to the students how to productively and wisely engage in the digital world instead of simply banning them or limiting their access.

6

Rethinking Teaching and Teachers: Creating Options for Students

There has been much discussion about teaching and teachers in education. One of the most important topics has been unfortunately about whether teacher education makes a difference or what qualities teachers need to become effective. But a much more important discussion today, in the context of access to technology and COVID-19, is what teaching should be like and what roles teachers should play (Zhao, 2018a, 2020b).

Teachers have traditionally been the primary source of knowledge for students and their primary role has therefore, been to instruct and thereby connect students with the knowledge. Thus, knowing the content and being able to deliver it well has been defined as the essential qualities for teachers. And teaching has been primarily about a teacher engaging and explaining to a group of students.

The art of teaching as a core technology of learning needs to change. Prior to COVID-19, student access to information, instruction and teacher interaction had already reached a proficient level in most schools. COVID-19 has reinforced however, that if students want to learn something, they can actually do so without necessarily being directly taught by the local teacher. Thus, in many ways, a teacher can operate perhaps more effectively, without being the major provider of the necessary content. COVID-19 has forced a wider spread of technology and a larger proportion of teachers to teach online. Unfortunately, many teachers indeed teach online by providing live or recorded instructions. There is a fundamental difference between online teaching and teaching online which requires further exploration through shared professional learning to ensure that all teachers are able to access relevant digital pedagogies.

But teaching can be different and so can the teacher's role (Tucker, 2020; Zhao, 2018a). Given the fact that students can learn through the ubiquitous access to learning resources, teachers need to think differently about their pedagogical approaches to ensure that for students of all achievement levels, time spent on learning can be optimised. Teachers could consider opportunities to co-create learning events and processes with students and parents to use technology and other means such as peer tutoring to learn. They work to create more options for students to learn. Their role changes when they don't always teach by leading from the front. They can be the curators of learning resources, manager of student projects, more relational, a personal consultant and advisor to students, and leaders of learning communities organised by students.

Conclusion

The six changes discussed should be considered with or without COVID-19, but the pandemic has made it more possible and more necessary to reimagine a contemporary view of education (Zhao, 2020a). We strongly encourage all schools in association with students and parents to rethink what will really matter to students in the future. How then will students best learn what matters through ownership of their learning, and what can be done to bring students into the centre of learning? We owe it to our emerging generations to create a cutting-edge educational experience that will enable everyone to thrive in an increasingly changing, challenging and complex world.

The primary objective of this paper has been to encourage policy makers and educators in the field to build on recent COVID-19 change management experiences by thinking and working together to create the contemporary learning environments that will enable all students to succeed. The changes outlined in this paper, however, are not the only changes that need to be made. Everything should be up for grabs as teachers and school leaders exercise their new-found community respect for their dedication and expertise and assume control of the learning agenda.

Top down policy directives over recent decades have done little to make teaching easier and more effective. Independent schools are well placed to lead the nation to build fit-for-purpose bottom-up solutions to the wicked educational problems that need to be addressed. Independent schools have the autonomy and thus greater freedom than schools in other sectors to innovative and to create new possibilities for their students through the strong engagement of parents as co-designers of bespoke education reforms. There is a great opportunity for the Independent sector and independent schools to restate their value proposition within the education market. Despite a severe economic contraction and unemployment rising rapidly as a result of COVID-19, a number of Independent schools have reported an uplift in enrolment enquiries as parent's express disappointment in relation to the quality of online learning provision in their current school.

Don't waste this crisis. Despite the enormous time and energy that all teachers have invested during recent months as traditional education delivery has been turned on its head, there has never been a better opportunity and time to customise your school to better meet the evolving needs of your community. The pauses in traditional face-to-face education (Zhao, 2020a) that have been experienced in recent times provide a unique opportunity to recalibrate and holistically rethink education within and beyond the school gate.

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A framework for reimagining your school could be the following What, How, When and Where essential questions.

What?

What should be taught to students? What should students become when they graduate from our schools? What abilities matter in the future? What should be assessed and reported? Should students have a voice in their own learning?

How?

How should learning happen? Should it only be in the traditional school day? Should the teacher continue to be the actor in the front? Should learning be more distributed? Should learning be guided by student passion and strengths? What role should students play in their own learning?

When?

When can and should learning take place? What options for learning are available? What additional learning experiences and locations can add to the educational experience? Who decides what constitutes a formal learning experience? How can we maximise technology to learn anytime locally, interstate and internationally?

Where?

Should learning only take place in the classroom? Should the teacher be the only source of knowledge? How can outside resources be utilised? How can students who are unable to come to school learn? How can students learn from outside resources globally?

Just as people respond after various crisis events by building cyclone-proof homes or installing fireproof basement shelters, we need to build crisis-proof and future-thinking schools. We cannot afford to let this moment pass without repurposing the fundamental aspects of education provision that need to be reimagined and, more importantly, transformed.

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