



# Education Reform: From the System to the School

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Global drivers of reform







## The brief:

- What are the most common drivers of education reform? The most common barriers and challenges?
- What are global trends in education reform?
- How will COVID-19 alter trends moving forward?
- How is the demand for a workforce for the future shaping education reform?

## Abstract

Many school systems across the world are actively seeking to improve student outcomes, processes that are frequently underwritten by reform in terms of structure and functions. A general tendency is to follow the trend perceived in public sector management to allocate accountability locally through devolution. This often means policies of school autonomy which are intended to enhance the quality of educational provision in search of higher levels of student attainment. The key question to ask is why is enhanced student attainment such an objective for global reform?

This paper identifies which drivers for reform are dominating the global picture and, perhaps just as importantly, explore what could and should be the factors which underpin schoolbased education as we move further into the current century. A case is made that the two principal divers of reform are economic and globalisation: economic because most governments seeking reform are seemingly driven by international comparisons which suggest enhanced student outcomes will benefit their gross domestic product (GDP) and globalization because countries reliant upon natural mineral resources are now recognising a need to enable their workforce to interact successfully beyond their own borders and culture. In returning to the could and should, however, the ongoing pandemic caused by Covid-19 demonstrates it has become apparent there is a need to revisit the way in which schools are structured to aid student learning, with the use of digital devices and artificial intelligence emerging as two fundamental issues to be addressed in school reform. What we have witnessed in 2020 is a shift to reorganising student learning towards remote or blended learning and what we have seen is rapid, required change which, arguably, was needed. As Vladimir Lenin stated "There are decades where nothing happens, and there are weeks where decades happen" - this sems to sums up recent experience.







### Introduction

This paper has four sections which not only examine the reality of drivers for school reform, but also explore the rhetoric and required aspects of this global trend if we are to create a workforce for the future. It is both an academic article and a think piece which explores the reality, rhetoric and required drivers for reform and then examines the implications for schools in the 21<sup>st</sup> Century and in the wake of the Covid-19 pandemic.

The *main drivers of reform* are identified as the desire for most countries to enhance their economic growth and general domestic product (GDP), coupled with the concept of globalization where there is a need to move away from isolation and recognize the increasing demand to communicate and collaborate beyond national boundaries and culture. These realities are accompanied by what I label *the rhetoric of school reform* which again has two dimensions: school autonomy and pedagogical enhancement. These concepts are challengeable and often seemingly misinterpreted by governments and practitioners alike, with a visible gap evident between good intentions and practical outcomes. In this section I will examine how these ambitions might be implemented rather than being abused. In the third section I will argue for what should *be required elements of school reform*: fundamental changes to how student learning are to be supported in a digital age and how we sustain children's innate desire for learning whilst seeking for enhanced student achievement – in other words how we can develop educated citizens who have life satisfaction. The paper then concludes by investigating the implications for schools if they follow the suggested route of adopting the reality of the current era whilst also challenging governmental and occupational rhetoric and exploring the aspects of education I argue are required.

# The real drivers of school reform

The fundamental driver for school reform appears to be economic and based on the simplistic premise that a better educated society will provide a workforce that enhances gross domestic product (GDP). To the best of my knowledge I know of no nation that has made that ambition explicit, but the emphasis on enhanced student attainment seems to underwrite most governmental policies on schools. The Organisation for Economic Development (OECD) estimated, for example, that if the United Arab Emirates (UAE) could raise the performance of its lowest-performing 15-year-olds at least to PISA Level 2, which can be considered a minimum for effective participation in industrialized economies, the additional long-term economic output these individuals are likely to generate for the UAE over their working life could be in the order of 2360 billion US\$, which exceeds three times the country's then current GDP (OECD 2015a: 3). Similarly, in England student results on international comparative measures of student attainment such as PISA, PIRLS and TIMMS make headline news as witnessed by the BBC bulletin in December 2019: "Pisa tests: UK rises in international school rankings". It is interesting to note, however, that the same bulletin also included the statement that "UK's teenagers were also found to have among the lowest levels of life satisfaction".







Schools have many functions and expectations which extend beyond the transmission of knowledge and cultural norms, arguably the key elements of formalized education. Recent responses to Covid-19 have demonstrated how vital schools are in supporting the economy by providing childcare which permits parents to continue working. Lockdowns across Europe, for example, have seen schools closed and parents being required to work from home and, simultaneously, educate their children in conjunction with schools operating remotely online. The impact of lockdown on national economies has been catastrophic with the combined effect of reduced workforce capacity as parents juggle home life and schooling with work requirements. It is clear the function of childcare is fundamental to GDP.

In 'normal' times, however, the onus on student outcomes is to provide a future educated workforce which makes a country economically effective. As can be gleaned from the short conversation above such levels of educational performance can lead to the undesired outcome of unhappy or stressed children, which contravenes the UN Sustainable Development Goal 3: to ensure healthy lives and promote well-being for all at all ages. The quest for SDG 4 – to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all - is thus sometimes in conflict with the desire for well-being. There seems to be an imbalance at present with the assessment of school performance and student outcomes often overriding the desire for well-being, but is clear that most national school systems are seeking an ever better qualified workforce which will enhance GDP. The notion that enhanced student attainment will lead to higher levels of economic performance is one of the two realities of reform (along with a generic expectation that school autonomy is the answer). There remains a question mark as to whether such a philosophy will satisfy the needs of a future workforce which will need to deal with a rapid and continually changing world and this will be explored more fully later in this paper, but for now we see the desire for enhanced GDP as being our first driver of reform.

The second real driver of reform is the notion of *globalization*, the process whereby citizens of the future are prepared to be able to deal with a complex and interconnected world which requires them to create meaningful relationships with others who do not share their same cultural background. Globalization is one of the greatest challenges of the 21st century with rapid change affecting nations in economic, technological and cultural terms. The concept is commonly seen as requiring countries to recognize "the global interconnectedness of different interests" which makes it difficult for even the most powerful states to maintain the integrity of their borders (Bottery, 2006: 100). Not only have we seen the world effectively become smaller, with international travel becoming commonplace, but we have also seen the growth of multi-national organizations, with elements of the production process often being spread across many regions and countries. This makes isolationism very difficult and for those countries wishing to expand their economies there is an emerging need for the internationalization of its workforce. Within the 21<sup>st</sup> Century the knowledge economy is more important than either natural resources or primary manufacturing (OECD, 2015), with a contemporary need to educate a future workforce to be able to interact







beyond its borders and its national culture. The need to educate citizens of the future has thus been driven by the concept of globalization.

# The rhetoric of school reform

In this section I examine global initiatives for reform which on the surface seem designed to enhance the learning environment for students through processes of school liberation – autonomy from government control – and pedagogical enhancement, both of which I argue provide us with the rhetoric of school reform. The basis for such a conclusion in relation to school autonomy is that despite policy statements and legislation proclaiming autonomy many schools work in an environment of increasing control – the concept of steering at a distance, a model labelled by Greany & Higham (2108) as '*coercive autonomy*'. In such scenarios high stakes accountability limit autonomy, leading to many school leaders becoming the "doers" of the bidding of others rather than "playing a lead role in shaping school leadership professionalism and education more broadly for the 21st century" (Cranston, 2013, x).

The second rhetorical driver for school reform is the concept of pedagogical enhancement, a global movement of learner-centred approaches to schooling based heavily on contested theory, emerging principally from the field of neuropsychology. The OECD examined the array of the so-called accelerated learning theories that had emerged and taken hold of many teaching practices towards the end of the previous century and labelled them as 'neuromyths' (OECD, 2002, 111):

A misconception generated by a misunderstanding, a misreading or a misquoting of facts scientifically established by (brain research) to make a case for use of brain research, in education.

For the OECD, neuromyths arose from findings or "results … that are, however, either misunderstood, incomplete, exaggerated, or extrapolated beyond the evidence, or indeed all of these at once" (OECD, 2007, p. 124). The 2002 OECD report considered the most embedded neuromyths to include those of Brain Laterality (Left Brain/Right Brain), Critical Periods and Enriched Environments. The 2007 OECD report refreshed the list to include VAK theory, the 10 per cent Myth and the Myth of Bilingualism. Given their use of contested neuroscience findings, there also is a substantial argument that The Mozart Effect, Multiple Intelligence theory and Brain Gym<sup>®</sup> should be recognised as additional neuromyths (Elton, 2018). Indeed, Elton's investigation of the use of such unsubstantiated and contested theories of enhanced learning showed how teachers in one local authority in England had adopted and adapted them in the quest for enhanced student outcomes:







... it seems [teachers] are on a quest for an altogether more comprehensive and enduring solution. Impelled by their seemingly indefatigable optimism in the quest for the metaphorical Holy Grail of teaching, the practitioners became pedagogically promiscuous, willing to overlook the unscientific basis of new models of practice, but only if they offered a prospect of success. For them, the key metric of success was improved student attainment outcomes. (Elton, 2018: 26)

Thus, the rhetoric of school reform has been the cumulation of two myths: perceived school autonomy and accelerated learning, both of which having exhibited enthusiastic followers, but with little evidence of impact.

#### The elements we require to make school reform effective

As we enter the third decade of the current century, we still seem rooted in pedagogical practices from the 19<sup>th</sup> Century despite having technologies that can not only enhance student outcomes, but enable them to become effective citizens within a rapidly changing world. I have identified three issues that should impact on school reform:

- Less centrality of teachers and schools to student learning;
- Moving teachers from being directors of learning to become facilitators;
- Encouragement of student self- directed learning and collaboration.

These three aims, the required elements of school reform, coalesce around portable handheld devices capable of Internet connection which present opportunities and challenges to the way in which student learning is organized in the current century. Traxler (2010) suggests such devices are pervasive and ubiquitous, with the availability of such devices, controlled mainly by the student and not the teacher, having the potential to change the traditional dynamics and pedagogical patterns of the learning environment (Burden et al. 2012).

The online world has redesigned communication in and outside the workplace; anyone can access almost anything about a topic, so [young people] are now accustomed to accessing multiple open sources of information for solutions. As a result, there are more collaborative technologies that have enabled the learning process to evolve from a fixed series of discrete training events into an informal, ongoing experience. Learning can easily occur anytime, anywhere and in a variety of formats. (American Society for Training and Development, 2009: 3)

As part of an investigation into student and faculty use of such technologies in a higher education setting, Aldhafeeri and Male devised a model which sought to guide learning in university education







beyond self-managed learning and provide an approach that made full use of digital technologies (see Fig. 1, below). In effect, such a model changes the role of teacher from "sage on the stage to guide on the side" (King, 1993) and moves the student beyond independence to a state of interdependency, a mode of operating that is essential to effective learning in a rapidly changing world.



Figure 1: Learning in a Digital Age - Aldhafeeri and Male (2015: 1512)

Education organizations and settings, however, typically remain organized around spatial and temporal considerations such as between the community, parents, students and school buildings, timetables, calendars and internal structures which are designed to classify and manage students (Male and Burden, 2014). Digital technologies, however, offer the potential for different forms of learning and teaching to occur both synchronously and asynchronously. This can afford learners more, and better, time for engagement than traditional learning spaces where responses and feedback are expected more immediately (Zieghan, 2001)

### Implications for schools in the current century and post Covid-19

The key elements for successful use of digital technologies in the twenty-first century are the teachers, leaders and other decision makers who have "the vision, and the ability, to make the connection between students, computers and learning" (OECD, 2015b: 191), with the 'holy trinity' of the student vision for educational experience being:

• learning that is socially-based and collaborative;







- learning that is untethered from the traditional constraints or limitations of education institutions; and
- learning that is digitally rich in context and relevancy. (SpeakUp, 2014:15)

The conclusion I reached in an earlier paper, when imploring educators to "move on" (Male, 2016: 22), was that there is still ineffective use of available digital technologies in educational organizations and settings which seems to be more to do with attitude rather than lack of opportunities and skills. In this century, however, this not a satisfactory reason for failing to take advantage of the capability to utilise the potential of digital technologies and personal mobile devices with Internet access. It seems, therefore, the current situation that permeates all phases of education globally in that the technology exists, as does the capability to use it, but the willingness to exploit it is limited. The source of such limitation is typically based around intransigence of teaching staff to adapt their practice, a response often disguised through concerns about student safety and the validity of data sources when using the Internet.

What we have witnessed because of the Covd-19 pandemic, however, was that change that could have taken decades took place within weeks as schools were forced to move their students' education online. Having moved on, let's continue moving in this digital age and make this enforced transition the norm as we go forward in the current century. Students in such a reformed system would be able to familiarise themselves with the concept or topic of planned learning outcomes and use the time when they meet to explore, discuss and evaluate the ideas in order to encourage cooperation, collaboration and interdependency. These are values which are highly valued in the workplace where, within a couple of decades, the tools used in most occupations will be replaced by digital ones (OECD, 2015b) and in situations where it is essential that "young people can demonstrate that they not only possess knowledge demanded by employers, but that they can *apply* that knowledge in different and unfamiliar circumstances" (Mann and Huddleston, 2015: 7: original emphasis).







#### References

Aldhafeeri, F, and Male, T. (2015). Investigating the learning challenges presented by digital technologies to the College of Education in Kuwait University. *Education and Information Technologies*. 21(6), 1509-1519

American Society for Training and Development (2009). *Transforming learning with Web 2.0 technologies*. ASTD Research: Virginia, USA.

Bottery, M. (2006). Education and globalization: redefining the role of the educational professional. *Educational Review*, 58 (1), 95-113.

Burden, K., Hopkins, P., Male, T., Martin, S. and Trala, C. (2012). *iPad Scotland evaluation*. Hull: University of Hull.

Cranston, N. (2013). School leaders leading: Professional responsibility not accountability as the key focus. *Educational Management, Administration and Leadership,* 41(2): 129-142.

Elton, J. (2018). A qualitative investigation into experienced educators' responses to professional development incorporating contested neuroscience. Unpublished PhD Thesis, UCL Institute of Education).

King, A. (1993). From sage on the stage to guide on the side. *College Teaching*, 41 (1), 30-35.

Male, T. (2016). Digital Technologies and Implications for Education in 21st Century. *Educationalfutures*, 7 (3), 6-26.

Male, T. and Burden, K. (2014). Access denied? Twenty-first-century technology in schools. *Technology, Pedagogy and Education*, 23(4), 423–437.

Mann, A. and Huddleston, P. (2015). *How should our schools respond to the demands of the twenty first century labour market*? Education and Employers Research: Occasional Taskforce Research Paper 4: February.







OECD (2002). Understanding the brain: Towards a new learning science. OECD: Paris.

OECD (2007). *Understanding the brain: The birth of a learning science*. OECD: Paris.

OECD (2015a). Better skills, better jobs, better lives: A strategic approach to education and skills policies for the United Arab Emirates. Paris: OECD publishing.

OECD (2015b). *Students, computers and learning: Making the connection*. Available at: <u>http://dx.doi.org/10.1787/9789264239555-en</u>, accessed 13 November, 2020.

SpeakUp (2014). *Digital learning 24/7. Understanding technology-enhanced learning in the lives of today's students.* Project Tomorrow: Irvine, CA

Traxler, J. (2010). Will student devices deliver innovation, inclusion and transformation? *Journal of the Research Centre for Educational Technology*, 6(1), 3–15.

Ziegahn, L. (2001). Diversity and intercultural communication in continuing professional education. *Adult Learning*, 12 (1), 11-12.

