Journal of Education and Culture Studies
ISSN 2573-0401 (Print) ISSN 2573-041X (Online)
Vol. 3, No. 2, 2019
www.scholink.org/ojs/index.php/jecs

Original Paper

Education and Democracy in the Time of Digitisation

Mike Douse[1*] & Philip Uys[2]

[1] International Educational Development Advisor, Ireland

[2] Division of Learning and Teaching, Charles Sturt University, Orange, Australia

[*] Mike Douse, International Educational Development Advisor, Ireland

Received: April 14, 2019 Accepted: April 23, 2019 Online Published: May 7, 2019

doi:10.22158/jecs.v3n2p147 URL: http://dx.doi.org/10.22158/jecs.v3n2p147

Abstract

With Digitisation, each of “democracy”, “education” and, consequently, and conclusively, “Education and Democracy” enters an exciting new dimension. Current considerations of how “government by the people” should be addressed, encouraged and embodied in schools are outdated, unless the realisation that nothing can ever be the same again becomes the starting-point. This paper explores the nature of that forthcoming and fundamental transformation, as made necessary and possible through contemporary technology and as embodied in The Global School. Just as piecemeal Information and Communication Technology (ICT) applications are of limited significance, so also are isolated experiments with democratic educational initiatives now obsolete. Universal connectivity straddles schools worldwide and cuts across the institutional, societal and historical factors that gave rise to pernicious politico-socio-educational injustice. Propagating democracy is essentially undemocratic; moral education is the antithesis of morality. The need from now onwards is for a convivial learning-supporting pedagogy, delivering the creative learner-driven curriculum, with the open, well-informed and on-going debate as the fundamental methodology. The substance, practice and consequences of education may now become much more equitable, ethical and enjoyable (and far less competitive, test-oriented and world-of-work-dominated). These and other implications for “Education and Democracy” of this ground-breaking “Education embodying Digitisation” reality are investigated and welcomed.

Keywords

Democracy, digitisation, education and democracy, global school, education and ict

1. Introduction

Perhaps it all began with Dewey. Some two millennia before him, Plato had much (of abiding fascination) to say about education, and also regarding governance, although he, in common with many who came after, saw δημοκρατία as something to be avoided, even feared. Quintilian regarded education as preparation for persuasive oratory but, in the manner of his times, restricted this to male patricians as opposed to “rule by the people” (or even “by the majority”), which would have included plebs, women and slaves. Democracy, whether it be direct, representative or constitutional, is an old word but a relatively recent and very far from universal phenomenon. It took the French Revolution to popularise it and, for a while, its paramount legitimate practicality became the conventional wisdom, at least in much of the West.

But few societies implemented democracy (let alone “liberal democracy”) substantially, successfully or sustainably. Some, for reasons mostly but not invariably malign, challenged or rejected it. Many used it for their own less than democratic purposes. For two recent centuries, well-intentioned initiatives have promoted the mutual fostering of democratic practice and egalitarian education, seeking schools that gave voice to their students, all the while set in less than democratic educational landscapes. Missionaries, colonisers and donors sought to spread their philosophies, dogmas and influence worldwide, with education as the available arena and, until the Soviet Union’s implosion in late-1991, a conspicuous Cold War battlefield.

These times are now well behind us. By no means the End of History—more, at least educationally, the Overcoming of Geography. As all learners and all teachers worldwide are (about to be) in contact with one another, the opportunities are of a different dimension than hitherto, comprehensively shared as opposed to discriminatorily segregated. This emerging everybody’s educational institution, this worldwide lifelong learning community, which may be referred to as The Global School (see below, and Uys & Douse, 2017), elevates considerations of “Education and Democracy” into a fresh and exciting dimension. Universal connectivity and worldwide inter-dependence come together within an evolving structure embodying humane values, lofty aspirations and contemporary common sense.

The Digital Age embodies overall transformation. As set out in this paper, isolated experiments—with ICT or with educational institutions—are no longer appropriate, nor indeed feasible. The Global School—as discussed in some detail below—not only embodies “power to the learners” but has the potential to empower the worldwide impoverished multitude. Considerations of education and/or democracy that are not based upon the digital reality are vain. Accordingly, with our heads in the cloud but with our feet firmly planted upon *terra firma*, courageously blending caution with creativity, let us explore how best “true” democracy may serve and be served by this emerging Global School and through the learners and teachers (i.e., the global populace) therein.

2. Pre-Digitalisation Democracy and Education

As with “love” and “beauty”, there is some dissension regarding the precise definition of “democracy” and, whether it originated in fields or factories, in parliament or on the streets, its advancement has been erratic and, indeed, its very concept is contested. Perhaps we are talking about the “rule of the majority”, or maybe the “power of the common people”, along with the absence of hereditary or arbitrary class distinctions or privileges: the ownership of the interpretations is all-important. Even the exact wording of President Lincoln's Gettysburg address (of twelve score and fifteen years ago) is disputed, although the notion of "government of the people, by the people, for the people" was certainly preceded in it by the words "under God" (see Conant, 2015).

Noting the (possibly less godly) People's Republic of China's demands for an equal position in the global competition over values and discourse, along with its endeavours to position itself as the "world's largest democracy", and challenging the West's prerogative of interpretation of political order, Holbig and Schucher (2016), argue that Western observers should refrain from dismissing "democracy with Chinese characteristics" as nonsensical and implausible. Their entirely reasonable approach is that "an examination of the underlying demands for discourse power would appear necessary, not only from the perspective of a pluralistic approach—which as such takes alternative worldviews seriously—(but that) the factual power of the normative must also be taken into account if such alternative governance discourses and values are to be introduced internationally as power resources" (Holbig & Schucher, 2016). It may also be added that around a fifth of The Global School's teachers and learners are Chinese citizens, contributing popularly and creatively to the ongoing debate.

Democratic education is often specifically emancipatory, with the students' voices being equal to the teachers'. John Dewey, referred to in the opening sentence, above, saw democracy as social relationships and "a commitment to mutual interdependence worked out in day-to-day interactions" (Dewey, 1916). A century on, Hopkins (2018) investigates whether "issues such as school governance and pupil voice facilitate Dewey's notion of democratic education", considering the "connection between concept and application and how this can influence the incorporation of the theoretical and the practical as part of children's learning in a given curriculum" (Hopkins, 2018). Essentially, Dewey viewed the mind and its formation as a communal process, echoing Matthew Arnold's description of "the spirit of democracy" that is part of "human nature itself", which engages in "the effort to affirm one's own essence... to develop one's own existence fully and freely" (cited in Honan, 1981).

Waghid (2014) regards "democratic education" as an "educational ideal in which democracy is both a goal and a method of instruction… it can include self-determination within a community of equals, as well as such values as justice, respect and trust". However, there is much merit in Portis' claim that "civic education, if taught in a compulsory setting, undermines its own lessons in democracy" (2003). As philosophers from Aristotle to A.S. Neill (1966) have put it "democracy must be experienced to be learned". Similarly, while Article 12(1) of the United Nations Convention on the Rights of the Child mandates that children be able to "have input on all matters that affect them", its authors then weakened this by adding the get-out clause that "their input will have limited weight in accordance with the age and maturity of the child" (United Nations, 1989). Where democratic situations are externally-imposed, inevitably some of those experiencing them will be more equal than others.

James (2018) recognises that "A wave of populist revolts has led many to lose faith in the wisdom of people power" but goes on to claim that "such eruptions are essential to the vitality of modern politics"

(Miller, 2018). He surmises that there is a growing fear that people, "too inflamed by narrow passions, risk turning politics into a distasteful blood sport, pitting *The People versus Democracy*, as one recent book" (Monuk, 2018) is entitled. Alarmingly illiberal political programmes (Miller cites those of contemporary Poland, Hungary and the Philippines—many others might readily have been mentioned) are "democratic" in the sense that they were elected: we may no longer take it for granted that the future is liberal and/or democratic. As Miller points out, "the democratic project, both ancient and modern, is inherently unstable... while widely admired, it is, in its liberal form, an embattled ideology" (2018).

Bartlett (2018) addresses the key challenges that Western democracy faces in the light of the growing power of hi-tech companies, claiming that "either technology will destroy democracy and the social order as we know it, or politics will stamp its authority over the digital world" (Bartlett, 2018). He sees the widening of the information pool fighting a losing battle against social media which "ultimately hinder us from developing and evaluating our own controversial thoughts… leading to the development of a 'moral singularity' whereby no individual really has their own views, with moral and political reasoning delegated to machines" (*ibid*). In these gig economy days of side hustlers, e-entrepreneurs and digital nomads, it is Facebook, Amazon, Apple, Netflix, Google, and others about to emerge, that delineate the frontline in the battle for global influence. Educationally, we cannot win the Information Campaign, nor indeed the Knowledge Battle, let alone the Wisdom War, with medieval weapons and an autocratic command system.

Assuredly, citizens are not as well informed as those propounding democratic theory would like them to be. Monuk (2018) recognises that civic education "has been declining for decades, because it does not easily fit curricula that rely heavily on standardised testing" and argues also that it "can be crucial in helping young people to manage disagreements and recognise other citizens as legitimate opponents in democratic conflicts". While these comments are undoubtedly valid, externally-devised (let alone examination-oriented) "civic education" is a 20th century relic. As discussed in more detail below, the debate-based methodology is geared to exemplify democracy in education, just as the growing range of relevant Global School modules (see Table 2, below, for a few examples) may enable those who choose them to experience and enjoy the conflicts and irrationalities that characterise contemporary living.

3. Education as Indoctrination

The use of schools to achieve religious, military, ideological, empire-governing, developmental or environmental outcomes, no matter how well-intentioned, is akin to using them in the production of chimney sweeps or child soldiers. The claim that the teacher is "an educator with an ethical mandate… an expert orchestrator of learning environments to foster and support the development of skills" (OECD, 2013) is true only in so far that the "ethics" prohibit the **proselytizing**: fostering skills is fine, provided that no-one's purposes, beyond those explicitly of the learner, are being served. Given that schooling has, over the centuries, been misapplied in the service of particular crusades, be they manipulative or benevolent, it is good that Digitisation offers an escape from education as indoctrination, albeit bringing with it heightened opportunities for exploitation (for, in our enthusiasm, we shall not be naïve).

Those who currently advocate that school curricula should be focussed upon, for example, livelihoods or social justice or—the current fad—sustainable development or, indeed, democracy, are good people but, despite (and in a sense because of) their goodness they are in cardinal error. For teachers, "ethics" relates to the honesty, openness and diligence applied in supporting the learning in the learner's chosen direction. For, in The Global School, the drive and the direction come from the learner, and this is to be reinforced and sustained by their teachers—it is that which represents their true ethical mandate. And it is a mandate that comes not from society's goals nor from personal commitments but, rather, from the learner as such.

Some have gone so far as to claim that illuminating good practice in teaching and learning with ICT will require "examining teachers' ideas, values, beliefs, and looking closely at the thinking that leads to observable elements in practice" (Webb, 2002). A few seconds of reflection will enable such remarkable and, indeed, authoritarian misconceptions to be consigned to the refuse bin marked "toxic twaddle". Consider a lorry driver or a medical practitioner or an airline pilot or a security guard or a specialist in family law. Who shall claim that, in order to identify good practice in any of these occupational areas, the "ideas, values, beliefs, and (underlying) thinking" of those practitioners would need to be investigated?

Schooling, and children experiencing it, have, over the centuries, been misused (nay, abused) in the service of various causes. A world increasingly characterised by rampant inequalities and by violence towards particular groups might suggest a focus on social justice through education. There is a sense that "the curriculum" should embody "what education is needed and for what type of society", related to such declarations as the sustainable development goals (UNESCO, 2017), and central to "discussions on cohesion, inclusion, equity and development… an integrated conception of education as cultural, social and economic policy, and particularly of the forms of insertion in society and the knowledge and information economy" (UNESCO, 2017). Doctrinaire determinism masquerading as democratic decency.

Hytten (2015) offers what she calls "provocations toward an ethics of teaching for democracy and social justice" claiming that "social justice teachers do not pay sufficient attention to the moral dimensions of micro, classroom-level interactions in their work", going on to consider "some ethical considerations for activist teachers, framed in three area of virtue". Supporting that "valuable way forward in developing an ethics of social justice educators, drawing on virtue ethics", Taylor (2015) stresses "one particular intellectual virtue in teaching for social justice: open-mindedness". In a further response, Gunzenhauser (2015) proposes "two communal habits implied in Hytten's work—cultivating solidarity and comfort with discomfort". To be clear: the notion of "activist teachers", albeit acting morally, exhibiting "open-mindedness" and facilitating negative capability, still presumes an evangelistic mission. Education is not about conversion and The Global School enables and requires the purging of proselyting, even in the name of "social justice", "solidarity" or "democracy".

It is difficult to avoid the notion of “**mindfulness**” these days: Creswell (2017) offers a practical primer. Seeing democracy as a philosophy and a political system, Hyde and LaPrad (2015) contend that “mindfulness can enhance a democratic way of being, connecting practices of awareness, reflection, dialog, and action to democratic citizenship and social arrangements”. They apply a “mindfulness pedagogy” to develop their concept of “mindfully democratic schools”, referring (as we do also) to the work of John Dewey, Paulo Freire and other philosophers of education in claiming that mindful practices may be embodied in such institutions whose “vision and principles promote teachers’ and students’ mindfully democratic action” (Hyde & LaPrad, 2015). In turn, Comstock (2015), acknowledging that “mindfulness is rapidly becoming a mainstream educational intervention”, rebuts the criticism that mindfulness lacks social and political dimensions by arguing that “far from being self-centred, asocial, and apolitical, the practice of mindfulness is intrinsically political” (Comstock, 2015).

Certainly teachers are fully entitled, at the express request of learners, to bring the latter’s attentions to particular and subjective experiences occurring to each of them in the present moment, which they, in turn, may each develop through the practice of meditation and other training. But, as already emphasised, irrespective of whether the impetus comes from Vipassanā, Zen or Tibetan meditation techniques, it is the learner who must decide whether or not to understand, acquire or utilise these techniques. Let them by all means be offered but let them not be urged upon them by enthusiastic teachers, any more than those committed to any other causes or creeds would be entitled to propagate them through schoolrooms, virtual or otherwise.

Strengthened guidance on improving the spiritual, moral, social and cultural development of pupils (DoE, 2014), published under the United Kingdom’s 2010 to 2015 Conservative and Liberal Democrat coalition government, called—with a far from traditional split infinitive—upon all schools “to actively promote the fundamental **British values** of democracy, the rule of law, individual liberty, and mutual respect and tolerance of those with different faiths and beliefs”. Lord Nash, then UK Schools Minister, explained that the changes were designed to “tighten up the standards on spiritual, moral, social and cultural development of pupils to strengthen the barriers to extremism”. Examples of the understanding and knowledge pupils are expected to learn included “an understanding of the importance of identifying and combatting discrimination”; an example of actions schools could take to promote British values was to “ensure all pupils within the school have a voice that is listened to, and demonstrate how democracy works by actively promoting democratic processes such as a school council whose members are voted for by the pupils” (DoE, 2014). The paradox is powerful, the contradiction colossal. For when an education system promotes something, no matter how excellent that something may be, the very act of systemic promotion is itself the antithesis of democracy.

As the Peace Pledge Union (2017) explains, “Education, in its various forms, is basically authoritarian, since one person, or small groups of people make decisions about what to learn, when to learn, how to learn, how to assess learning, and the nature of the learning environment”. However, even that organisation’s well-intentioned objectives embody inconsistencies: “Democratic education aims to develop real democracy through active participation by all those involved in classrooms and educational institutions" (Peace Pledge Union, 2017) is all very well but it is hard to escape the impression that those involved are keen for certain "peaceful" attitudes to emerge, democratic participation notwithstanding. Just as inculcating British (or Irish, or any) values is essentially undemocratic, so also is encouraging young people to make up their own minds, in the unspoken hope that the outcome will be peace-loving is, at heart, benevolently authoritarian.

Advocating "**experiential education**", Roberts in *Beyond Learning by Doing* (2012) calls for a new current, critical pragmatism, which "… renews a sense of democratic experiential education as a means of both resisting the negative aspects of modernism and capitalism as well as creating an ethical platform for the advancement of positive freedom through education" (Roberts, 2012). He goes on to explain that the ownership of the knowledge gained from an experience ("self, mind, society, or the community of animate and inanimate objects?") is the critical question, giving the answer that "truth is communal". As Roberts writes: "We discovered that, shot through this notion of 'democratic schooling', are some very sticky questions about power, equality, and justice that remain unresolved in many respects" (*ibid*).

Roberts (2012) encourages experiential educators to revive democracy in schools by living the experience and avoiding quick technical solutions to educational dilemmas. Michalec (2012), in his review of Roberts' book, asserts that "experience in schools can also liberate and resist the undemocratic oppressive impulses in education", going on to claim that "Roberts's analysis of neo-experientialism is a clarion call for renewing the greater purpose of experiential education in schools, particularly democratic participation and personal transformation" (*ibid*). Roberts turns to a more hopeful possibility: democracy "is not, in the end, a birthright, something to grasp and own. It is, as Dewey reminds us, a way of life. It is something to enact day to day in our relations with others" (*ibid*). While The Global School, in its learner-driven spirit, manifests democracy, its teachers do not propagate democracy nor have any intention of instilling it, for to do so would be profoundly undemocratic.

4. Critical Pedagogy as Worthy Anachronism

Wholly admirable educational philosophers have claimed that there can be no neutral educational process. Good and intelligent people have, over the ages and with much justification, rejected a system that "values assessment over engagement, learning management over discovery, content over community, outcomes over epiphanies" (Hybrid Pedagogy, 2013). Critical Pedagogy, while seeing itself as much a political approach as an educative one is predicated on fostering agency and empowering learners (implicitly and explicitly critiquing oppressive power structures). Some of its adherents may see pedagogy as praxis, insistently "perched at the intersection between the philosophy and the practice of teaching" (*ibid*). They consider that pedagogy necessarily involves recursive, second-order, meta-level work and that, on such bases, an "ethical pedagogy must be a critical one" (for example, Eichsteller &

Holthoff, 2011). Teachers teach; pedagogues teach while also actively investigating teaching and learning.

Critical Pedagogy suggests a specific kind of “anti-capitalist, liberatory praxis” (Freire, 1968). As “a social justice movement first, and an educational movement second” (Morris, 2014), it is claimed that Critical Digital Pedagogy must also be a method of resistance and humanization… not simply work done in the mind, on paper, or on screen… it is work that must be done on the ground” (Stommel, 2014). Echoing Freire, Stommel claims that “pedagogy is not ideologically neutral” and, in his forward to Freire’s Pedagogy of the Oppressed, Richard Shaull writes that “Our advanced technological society is rapidly making objects of most of us and subtly programming us into conformity to the logic of its system… The paradox is that the same technology that does this to us also creates a new sensitivity to what is happening” (Shaull, 1968).

A Critical Digital Pedagogy demands that open and networked educational environments, such as those blended within The Global School, must not be merely repositories of content but, rather “…platforms for engaging students and teachers as full agents of their own learning” (Shaull, 1968). On the basis that Critical Pedagogy is primarily concerned with an equitable distribution of power, Pete Rorabaugh (2012) asserts that “If students live in a culture that digitizes and educates them through a screen, they require an education that empowers them in that sphere, teaches them that language, and offers new opportunities of human connectivity” (Rorabaugh, 2012).

Any yet, in this Digital Age, such worthy sentiments are of historical interest only. Critical Pedagogy, however defined, had a central place in the discussion of how learning was changing in the first few years of the 21st century because it was primarily concerned with an equitable distribution of power. In The Global School, just as the learner owns the curriculum, so also is the teacher’s role that of creatively supporting the learning. By all means let teachers be warm-hearted liberators—but first let the learners be liberated from the bonds of their teachers (who, in turn, shall be freed from the hegemony of educational managers, directors and ministers).

The Critical Pedagogy made wonderful sense for as long as the traditional notions of teacher as leader and of schooling as enforced regimentation persisted. With the realisation that the learner leads, and with the ending of curricula as propaganda, everything—including prehistoric critical (digital or otherwise) pedagogies—falls by the wayside. The Global School resolves and outwears the fascinating late-second millennium discussions of pedagogy by determining the ownership and nature of the process, embodying a learning methodology that is neither technology-driven, nor indoctrination-targeted, nor the sporadic use of some devices and systems by some teachers some of the time.

5. Isolated Innovations in Outmoded Settings

Although the potential for digital technologies to transform ways of organising the curriculum, teaching, learning and the school environment has been celebrated since the 1970s, the “profound changes hoped for have not materialized and, to a great extent, these digital devices and resources are very often used as new means of transmitting content and reproducing approaches of traditional education" (UNESCO-IBE, 2014). By and large, the educational experience of ICT has been **four decades of disappointment**. Some teachers reorganise the delivery of the curriculum, but "the majority use ICT to add to or enhance their existing practices" (Loveless, 2008). Rather than educational systems, and schools within those systems, transforming themselves into Digital Age institutions, we have isolated early-21st century innovations misplaced in 20th century settings: the anacronistic adfrift in the archaic.

It is as if contemporary automobiles were still plodding only those routes trodden by horse-drawn vehicles a couple of generations previously. There is also an acknowledgement that, to date, the "instantaneous communication, the possibility of immediate access to a staggering amount of information and knowledge online, and the growing availability of digital technologies", have achieved but little "progress in educational inclusion based on the necessary changes regarding the curriculum, teachers and underlying pedagogy" (UNESCO-IBE, 2014). Essentially, ICT is a second millennium conception. Unless the entire environment is transformed in an integrated fashion, a few worthy novelties will not only appear out of place but their incongruity may damage the overall entity, missing the vital opportunity for synergies to occur. Only by recognising, planning for and promoting wholehearted Digitisation-based transformation may education's worldwide potential for communal well-being, human happiness and, indeed, democracy be fully fulfilled.

Glaeser, Ponzetto and Shleifer argued that "across countries, education and democracy are highly correlated" claiming that "schooling teaches people to interact with others and raises the benefits of civic participation, including voting and organizing". They go on to contend that "As education raises the benefits of civic participation, it… increases the likelihood of democratic revolutions against dictatorships, and reduces that of successful anti-democratic coups" (Glaeser et al., 2006). This is arguable but not self-evident: an examination of available lists of comparative (and measurable) educational results suggests that several East Asian countries are performing relatively highly and that, while some—but not all—of those are regarded as democracies, their curricula are often examination-oriented rather than civilly participative [It may be added that, not only will The Global School make such odious PISA-fabricated comparisons meaningless, its approach will involve that of enabling learners to explore and assess unsubstantiated claims, such as those of Edward Glaeser and his National Bureau team].

Undoubtedly, contemporary technology has already accelerated the debate regarding what education is for. Vivekanandan (2017) argues that "…in today's world, education is not only to produce learners who are literate and numerate (but must also) facilitate the holistic development of our young people such that they are creative, resourceful, self-disciplined, adept at collaborating with others, appreciative of diversity, able to resolve conflicts and contribute peacefully to democratic societies. Some people refer to these as '21st century', 'transferable' or 'socio-emotional' skills" (Vivekanandan, 2017). Another desirable capability, apparently, is "information literacy… including the ability of learners to search for information and separate high-quality sources from low-quality ones" (World Bank, 2016). Here again, the proscriptions are as outdated as they are well-intentioned: setting out desirable skills, capabilities and attitudes negates the entire notion of democratic education in the time of Digitisation: it is time to be as clear as possible regarding the evolving Global School.

6. Education in the Time of Digitisation: The Global School

Digitisation has changed, and is continuing apace further to change, both the nature and aspiration of educational objectives and the means and enjoyment of their achievement. The society in which the teachers and learners operate has altered radically—and will be characterised by on-going alteration. This thoroughgoing surge forward represents a pivotal leap in human potential as profound as the wheel in relation to development and as significant as the book in the context of information. As Foer suggests, "there has never been a better time to advance a vision for how to organise technology in a way that benefits everyone" (Foer, 2017).

Many earlier initiatives presaged aspects of The Global School. In Leo Tolstoy's school for peasant children in the late 19th century "…the pupil had always had the right not to come to school, or, having come, not to listen to the teacher, and the teacher had the right not to admit a pupil, and was able to use all the influence he could muster to win over the community, where the children were always in the majority" (Krznaric, 2013). Along similar lines, English (2002) identified "inclusivity and rights, equal participation in decision-making, and equal encouragement for success" as the political elements in democratic education. As noted by Waghid (2014), "Democratic education is often specifically emancipatory, with the students' voices being equal to the teacher's". Foreshadowing a key Global School element, Ricci suggested that "While democratic schools don't have an official curriculum, what each student actually does might be considered their own curriculum" (Ricci, 2012).

The new era ushered in by Digitisation, symbolised by the emergence of The Global School, is as utterly changed from that which has gone before as would have been the pre-books to with-books transformation. Such a holus bolus renovation is necessitated and enabled by Digitisation, including the emergence of what, for all intents and purposes, may be regarded as The Global School. Its particular manifestations in relation to what is to be learned comprise the emergence of the transformative and transnational **Learner-Driven Curriculum**. This, of course, needs to be matched by the development of the convivial and constantly creative **Learning-Supporting Pedagogy**. Whether dealing on a one-to-one tutorial basis, guiding a conventional face-to-face class, handling a hundred or so learners in fifty locations in two dozen countries, or developing modules for future utilisation by come whomsoever may, the teacher's methodology is one of guiding and supporting as opposed to directing and supervising: more Satnav than satrap.

The conceptualisation of all educational institutions being integrated elements of the one universal organisation—The Global School—illustrates the emerging situation, with details undoubtedly spectacular but as yet unknown. With Digitisation it is now practicable and necessary to think of there being but one (soon to be fully-connected and networked) worldwide educational institution, integrating the ever-expanding range of relevant ICTs in a coherent fashion. Only by recognising, planning for and promoting this evolving development may education's worldwide potential for communal well-being and human happiness be fully fulfilled.

This, as envisaged by the present authors, is the rural school for hungry children in disadvantaged areas of Haiti, Burundi and Nepal. It is the fee-paying college serving the sons and daughters of prosperous parents in a leafy suburb of any European capital or resort. It is the academy for teenage would-be computer engineers and specialist doctors in Johannesburg, Beijing and New York. It is the mixed-age class run in tents by volunteers for up-to-sixth-generation juveniles in refugee camps from Aqabat Jaber on the West Bank through Nauru by way of Lesbos on to Darfur. It is Eton College near Windsor and Dawakin Tofa Science Secondary School in Kano State and Moriah College in Sydney and the Princesses' School in Riyadh and the reformatory for young offenders in Abu Dhabi and the second-chance street school for dropouts in Dhaka or for recalcitrant rascals in Port Moresby.

With the emergence of The Global School and the creative application of ubiquitous and relatively-inexpensive hand-held devices, a long-overdue **move away from high investment solutions** should eventuate. That over-priced, imported response is now redundant and the machinery antediluvian. Moreover, as Edward Carr (2011) and others have so effectively pointed out, the kind of development most likely to promote its intended beneficiaries is that which they are allowed the opportunities to devise (Carr, 2011). These are Global School characteristics: learner-driven, universally participative and affordably accessible.

To offer just one example, let us imagine an ill-equipped lower secondary school in an impoverished and inaccessible area of Africa (or Asia, or South America, or mid-Pacific…), and every teacher and pupil therein, becoming readily and inexpensively in contact with institutions, teachers, learners, counsellors and materials providers worldwide. Obviously, without imaginative planning and effective support, this could be chaotic distraction. Alternatively, as should happen in The Global School, information and ideas would be exchanged, stimulating software accessed, assignments assessed and constructive suggestions offered and applied, lessons, tutorials and practical sessions shared, staff responsibilities reordered, continuous professional development transformed, and a whole host of other possibilities explored. Once the realisation that each pupil is a valued and proactive participant in the one worldwide collective is appreciated, the success of Agenda 2030's Sustainable Development Goals—or of whatever set of aspirations are agreed upon—may occur.

Taking "democracy" as an example, and addressing it from a global perspective, its current teaching—where it occurs at all—ranges from "how to vote" through to "how to protest", with the several overlapping categories including (a) the descriptive, (b) citizenship-related, (c) historically and geographically comparative; and (d) the radical (challenging and changing the process). The Global School approach is radically different and some of these seminal distinctions are depicted in the table.

Table 1. The Ravine between "ICT in Education" and "Education Based upon Digitisation" (using "Democracy" as an Example of a Chosen Module in a Learner-Determined Curricula)

ICT in Education	Education based upon Digitisation
Late 20th century	Early 21st century onwards
Specialised "Education and ICT" policies, reports and plans	"Education" policies, reports and plans that take full account of Digitisation's focal role
Costly Computer Rooms with high-priced hardware	Inexpensive handheld Bring-Your-Own-Devices: embodying "democratic participation"
ICTs used in isolation	ICTs integrated and used coherently
Learning-outcome oriented	Learner-teacher participation oriented
"Computer Science" as a discrete and optional subject	Digital understanding (both digital literacy and fluency) embodied across the curriculum
Entity-specific	Universal-comprehensive
"Democracy" included in curricula*	Bespoke learner-driven curricula
Some learner participation in some aspects of school administration	Worldwide educational system geared to support each individual learner

Educational psychologists have given much attention to **Self-Regulated Learning** (SRL) from both theoretical and practical perspectives (see Schunk & Greene, 2018 for an up-to-date overview). Contributors to that debate come close to consensus on the desirability of enabling "students of all ages and backgrounds to manifest those thoughts and behaviours indicative of deeper processing with regularity, regardless of the task or domain with which they are engaged… such depth of processing is intertwined with the regulation or monitoring of performance and tied to better learning or task outcomes" (Alexander, 2018). As the Global School eventuates, the emphasis moves from the external ("what strategies are associated with successful learning?") to the personal ("how may I learn more of that which I choose to study more effectively and enjoyably?")

Along with the Global School's recognition that at last, from the secondary phase onwards, learners will "own" their curricula, comes a realisation that this involves an enhanced responsibility for their own learning strategies. No longer dependent upon persistent teacher feedback or cramming for exams, the learner, who has opted to study some non-academic or creative theme or, for instance, *Mathematical Ideas for Non-Mathematicians*, will need, desire and be best poised to reflect upon their own approaches.

7. Whose Curriculum?

What has characterised curricula from Platonic time onwards is the unchallenged external ownership. Even if teachers and technologies exert some influence over that which is laid down, the laying is conducted by politicians, bureaucrats, academics and sundry pressure groups. With Digitisation, such external ownership may be laid aside. The driving force and assumed justification for national curricula have been a country's assumed right and duty to apply education in the production of productive workers (see Douse, 2013) and good citizens. It may be anticipated, and welcomed, that the power of learner-driven curricula will overcome this last night of the professorial oligarchs. With such awakenings, albeit within convivial settings, dramatic conversions occur.

Table 2. Some Examples of Available Global School "Democracy" Modules by Category

Standard	Specialist	Bespoke
What is Democracy?	Does Democracy Work?	"If there is no existing course that meets your needs, please set out as much detail as possible on the Module Request Form and you will be contacted by a Curriculum Designer. Once a new Module has been created it will be available to you and other learners in the usual way".
Democracy in six countries: a comparative study	Using democratic process to achieve radical change	
A History of Democracy	Is [name of country] a "Democracy"?	
Democracy in [name of country]	Losing faith in Democracy	
Does my vote matter?	The formation and manipulation of opinion: challenges facing Digital Age Democracy	
Getting involved in politics		

Empowerment will apply only—and being full agents will apply if and only—what is studied and how it is to be mediated emerges from the learner. It is the latter, guided by the former, who chooses what to enjoy learning, within convivial frameworks provided by the teacher. Contemporary incentives—places in prestigious colleges, praise, glittering prizes, good jobs, avoiding punishment—give way to deeper and more personal motivations: pursuing enthusiasms, understanding aspects of the physical and intangible world, enjoying the quest for knowledge and wisdom. Accordingly, it is the learners who "own" the curriculum: given their fingertip access to virtual infinities of information and legions of fellow-students, along with their unrivalled acquaintance with their own emerging interests and fascinations, it could not be otherwise (see Douse & Uys, 2018, for a deeper discussion of Digital Age [learner-owned] curricula).

As mentioned earlier, experiments with pupil-led (or leaderless) schools have not been unbridled successes: islands of democracy cannot flourish in oceans of authoritarianism any more than atolls of ICT might thrive in seas of medievalism. What is advocated here—suggested by contemporary technologies rather than derived from educational philosophies – is that the (digitally-comfortable) teachers would still rally and encourage the learners but that the latter, advised by the former, would choose that which they would study. Teachers will guide and provide support but they will no more determine the curriculum nor enforce their preferred pedagogy than will outside agents—universities, employers, religious leaders, politicians, local chiefs—interfere with content and process beyond their legitimate roles as advisors to those who play and thus control the learner roles. It is the learner who now occupies the driving seat; the teacher offering guidance as opposed to direction, and refraining from determining the destination.

8. Equality and Inequity

From both national and international perspectives, education, as presently practiced, is the enemy of equity. At the slogan levels, diversity is delightful and inequity abhorred. In practice, and in educational institutions and processes everywhere, categorisation and rejection are rife. “Meritocracy”, originally coined as a derogatory term (Young, 1958), is deliberately embodied in many national plans and educational practices as an ideal. Young himself regretted that education had put its seal of approval on a minority who, through “luck in the genetic lottery and in the historical contingencies of their situation” had succeeded and its seal of disapproval on the many who fail to shine”. This he saw as a “meritocratic dystopia”, calling for a plural society “both possessed and acting upon plural values” including kindliness, courage and sensitivity (*ibid*).

Currently, the analysis of Thomas Piketty (2014) highlights the significant increase in social inequality and the return of patrimonial capitalism. The IMF’s Christine Lagarde reports that “since 1980, the top 1% globally has captured twice as much of the gains from growth as has the bottom 2%” (Lagarde, 2018). Other than at conferences and in the pages of peer-reviewed journals, there are few signs of education systems genuinely gearing up to overcoming inequality and preparing all of the world’s, children confidently, competently and cheerfully, to seize this century’s opportunities. Digitisation, as opposed to mere ICT, enables and requires those lofty aspirations to be addressed, along with a re-opening of the important debate on what education, now inevitably in the context of Digitisation, and constituting development of itself, is really for.

Intangible capitalism, Uberised and Amazonified working conditions, and the upcoming post-human economy have the potential to entrench and exacerbate inequality—both within and between nations. Franklin Foer sees the consequences proceeding even further, colonising the human mind itself: “Solitary genius is replaced by the wisdom of the crowd, the networked mob enforces conformism… algorithms make it impossible to think for ourselves” (Foer, 2017; cited in Tarnoff, 2017). This is the context in which Digital Age education must operate: it has yet to be thoroughly thought through on that basis. Perhaps brain-computer-interfaces, incorporating safe, small, wireless and long-lasting cortical implants, will enable the achievement of a concomitant upgrade in human capabilities. Indeed, the late Stephen Hawking forecast that genetic editing techniques would give rise to a “race of self-designing beings who are improving at an ever-increasing rate” (Hawking, 2018). Given his earlier comments regarding developments in artificial intelligence evolving into a “new form of life that will outperform humans” (Hawking, 2017) it is increasing clear that even how best to go about predicting the future is utterly unknowable. Education as preparation has had its day.

Reproduction theorists, such as Bowles and Gintis (1976), offer an overtly deterministic—albeit rather convincing—view of schools, setting out how the existing system embodies and perpetuates the exploitation of one class by another. Taking this forward into the area of curriculum, Basil Bernstein's distinction between the "context-dependent and particularistic" restricted code of the working class and the "independent and universalistic" elaborated code of the middle class is valuable in analysing pre-Digitisation schooling. But the two forms of educational transmission analysed in *Class and pedagogies: visible and invisible* (Bernstein, 1977) attain fuzziness in the Digital Age. Bernstein's concern with the boundaries between curricular categories (areas of knowledge and subjects) and the "degree of control teacher and pupil possess over the selection, organization, pacing and timing of the knowledge transmitted and received in the pedagogical relationship" would not have survived the onset of Digitisation.

The Global School offers genuine possibilities for breaking the link between cultural and educational codes and the content and process of education related to social class and power relations (see Bernstein, 1973). Universal connectivity straddles schools worldwide and cuts across the institutional, societal and historical factors that gave rise to pernicious politico-socio-educational discrimination. Once it is recognised that all learners and all teachers are in the one universal school, everyone's education—and thus every individual life—may develop what Amartya Sen called "capabilities" (Sen, 2002) manifesting the right to feel (and be) of value, to engage in society (worldwide as well as locally) and to have a stimulating, thriving and uniquely self-fulfilling life.

Enforced "student selection" may now thankfully be discarded to the scrapheap, along with that damaging oxymoron "educational economics". Welcoming all learners irrespective of background, gender, previous knowledge, age or other such factors, to the lifelong Global School offers much potential but involves getting beyond the banners and being judged by practical consequences. Just as any number of people may appreciate and benefit from watching a play, walking the mountainous foothills, cheering on their sports team or reading a novel, so also may a multitude of learners, in various situations and locations, enjoy shared and challenging educational experiences without being graded, beaten, rewarded with trophies or held up to ridicule. Such is the pleasant, participative purposeful and essentially Democratic worldwide educational institution that Digitisation makes feasible and essential.

Given that teaching will need to embody a constructivist pedagogical orientation, actively including learners in determining meaning and knowledge for themselves, the **genuine participation of students**, of all categories and most ages, in constantly renewing and redesigning The Global School is imperative. Given the essential nature of their creative participation in these years of major transition, the recognition and full involvement of **teachers' professional organisations and representative federations** is vital. The potential is there for a partnership between humans and machines, a symbiosis where each side does what it does best, with machines augmenting rather than replicating let alone replacing human intelligence. So let it be emphasised again that, in defining such a partnership, just as in all other aspects of determining digital age educators' roles and remuneration, the full involvement of both learners and teachers [“Should the machines participate in those consultations?” is another topic for debate—which fundamental pedagogic activity is now addressed].

9. Speak Up At the Back

In modern life, oral communication is still critical, even though typed dispatches, as in text messages and on various social platforms, are become more prevalent. Currently in schoolrooms it is still mostly words on pages. Humankind’s most vital occupational and social skill is not encompassed by the 3Rs of reading, writing and arithmetic (perhaps “oracy” —spoken communication—should become the fourth “R”). Pedagogy is still attached to the pen—and, to an increasing extent, the keyboard, be it desktop or mobile—rather than to the learners’ organs of speaking and hearing. While some of this is inevitable, in that what is spoken is transitory and untransmittable in comparison with that which is written or uploaded, opportunities for supporting all students in building up their oral communication skills abound.

As already emphasised, the internet heralds a fresh pedagogical era. Digitisation makes possible, nay necessitates, that the educational institution, whether it be set in a leafy suburb of a Western capital or in some remote ramshackle huts in the under-developed world, will embody connectivity. This worldwide linkage will be both electronic and personal—hopefully, students will be active, information and digitally literate, sharing their learning globally. Ideally, all will be vigorous players in the learning and teaching process, taking responsibility for their own knowledge acquisition. Essentially, Global School education will emphasise personalised E-learning and increasing engagement, characterised by ongoing and creative spoken communication.

Samuelsson (2018) examines two different forms of criticism against consensus in democratic education: that it “fails to account for the conflictual nature of democracy and thereby disallows disagreement and (what he calls) dissensus” and that it “disrupts the pattern of communication in classroom discussions”. While his counter-argument, that consensus is a “multifaceted concept that allows for different types of agreements and disagreements to coexist” (Samuelsson, 2018) is compatible with The Global School debate-based methodology, a more important consideration is that learning outcomes are not predetermined by teachers nor by “the system”. For example, mock elections and political simulations may be effective and enjoyable learning experiences for those who choose to participate in them, as opposed to their being “promising tools to instigate democratic learning in schools” (de Groot, 2018).

This fundamental debate-based pedagogy, involving all participants—not just the competitive few along with the vocally challenged minority—embodies the well-informed exchanges of ideas—a mind-expanding experience and a honing of judgemental skills, eclectic, interrogative and principled—as the learner-originating educational process increasingly mirrors the enjoyable oratorical cut-and-thrust (see Douse, 2017). Learning, whether through debates, preparing for debates, reflecting upon debates, evaluating debates, or otherwise, is neither tranquil consensus nor uninterrupted communication. Rather, it is a never-ending search, a fulfilling journey rather than a prescribed destination. It a wondrously complex universe, it could not be otherwise.

Digitisation, symbolised by the Global School, signals a sharing of learning experiences and a coming together of classroom cultures. Whether universal connectivity necessarily causes universal values and references, embodied in the shared desire for a better and more solidarity-based world, along with a "strong core of universal values that reinforce meanings and practices regarding justice" (Tedesco, Opertti, & Amadio, 2013) remains as yet unproven. Digitisation offers oceans of alternatives and seas of questioning: tides that neither edict nor entropy may ever turn around (nor UNESCO usefully tabulate). In that the learning agenda may emerge from learners' interests and enthusiasms, a matching teacher-guided and learner-determined process may evolve in parallel, again arrived at from the worldwide rather than from the national level. Educationally, and maybe democratically also (although that remains a matter for debate), these are the most exciting times since Socrates.

References

Alexander, P. A. (2018). Looking down the road: Future directions for research on depth and regulation of strategic processing. *British Journal of Educational Psychology*, *88*(1), 152-166. https://doi.org/10.1111/bjep.12204

Bartlett, J. (2018). *The People versus Tech: How the Internet is Killing Democracy (and How We Can Save It)*. Jamie Bartlett. Ebury Press.

Bernstein, B. B. (1973). *Pedagogy, Symbolic Control, and Identity: Theory, Research, Critique*. London, Rowman & Littlefield.

Bernstein, B. B. (1977). *Class, codes and control, Volume III: Towards a theory of educational transmissions* (2nd ed.). London: Routledge & Kegan Paul.

Bowles, S., & Gintis, H. (1976). *Schooling in Capitalist America: Educational Reform and The Contradictions of Economic Life*. Routledge & Kegan Paul, New York.

Carr, E. H. (2011). *Delivering Development: Globalisation's Shoreline and the Road to a Sustainable Future*. London: Palgrave Macmillan.

Comstock, P. W. (2015). The Politics of Mindfulness. *Democracy and Education*, *23*(2).

Conant, S. (2015). *The Gettysburg Address: Perspectives on Lincoln's Greatest Speech*. New York, NY: Oxford University Press.

Creswell J. D. (2017). Mindfulness Interventions. *Annual Review of Psychology*, *68*, 491-516. https://doi.org/10.1146/annurev-psych-042716-051139

de Groot, I. (2018). Political Simulations: An Opportunity for Meaningful Democratic Participation in Schools. *Democracy and Education*, *26*(2), Article 3.

Dewey, J. (1916). *Democracy and Education: An Introduction to the Philosophy of Education*. New York: Macmillan.

DoE. (2014). *Guidance on promoting British values in schools*. UK Department of Education.

Douse, M. (2013). *Chalkboards and Cheeseboards—Resisting the Workplace's Colonisation of the Schoolroom*. Retrieved from http://www.norrag.org/chalkboards-and-cheeseboards-resisting-the-workplaces-colonisation-of-the-schoolroom/

Douse, M. (2017). Digitisation, Education and Debating. *Journal of Contemporary Argumentation and Debate*, *47*.

Douse, M., & Uys, P. M. (2018). Secondary Curriculum in the Time of Digitisation. *Journal of Education and Culture Studies*, *2*(4). https://doi.org/10.22158/jecs.v2n4p287

Eichsteller, G., & Holthoff, S. (2011). Social Pedagogy as an Ethical Orientation towards Working with People—Historical Perspectives. *Children Australia*, *36*(4). https://doi.org/10.1375/jcas.36.4.176

English, L. D. (2002). *Handbook of International Research in Mathematics Education* (p. 21). Lawrence Erlbaum Associates.

Foer, F. (2017). *World Without Mind: The Existential Threat of Big Tech*. Jonathan Cape, London.

Freire, P. (1968). *Pedagogy of the Oppressed* (In Myra Bergman Trans.). A Penguin Education Paperback, London.

Glaeser, E., Ponzetto, G., & Shleifer, A. (2006). *Why Does Democracy Need Education* (National Bureau of Economic Research Working Paper)? NBER Program(s): Economic Fluctuations and Growth, Law and Economics, Public Economics, Political Economy.

Gunzenhauser, M. G. (2015). Enacting Social Justice Ethically: Individual and Communal Habits. *Democracy and Education*, *23*(2).

Hawking, S. (2017). *Humanity Must Go Inter-Stellar, Interview in Wired Magazine, March 2017*. Retrieved from https://www.wired.co.uk/article/stephen-hawking-interview-alien-life-climate-change-donald-trump

Hawking, S. (2018). *Brief Answers to the Big Questions* (p. 13). London, John Murray.

Holbig, H., & Schucher G. (2016). "He who says C must say D"—China's Attempt to Become the "World's Largest Democracy". *GIGA Focus, June 2016*.

Honan, P. (1981). *Matthew Arnold, a Life*. New York, McGraw-Hill.

Hopkins, N. (2018). Dewey, Democracy and Education, and the school curriculum, Education 3-13. *International Journal of Primary, Elementary and Early Years Education*, *46*(4), 433-440. https://doi.org/10.1080/03004279.2018.1445477

Hybrid Pedagogy. (2013). *Primer: Digital Pedagogy*. Retrieved from http://www.hybridpedagogy.org/digitalpedagogy/

Hyde, A. M., & LaPrad, J. G. (2015). Mindfulness, Democracy, and Education. *Democracy and Education*, *23*(2).

Hytten, K. (2015). Ethics in Teaching for Democracy and Social Justice. *Democracy and Education*, *23*(2). Article 1.

Krznaric, R. (2013). Six Life Lessons from Leo Tolstoy. *Daily Good News*, *2013, December 23*.

Lagarde, C. (2018). The Rise of Robots Will Deepen Inequality, IMF Statement. *Guardian* (p. 31), London.

Loveless, A. (2008). *ICT, Pedagogy, and the Curriculum: Subject to Change*. London: Routledge Falmer.

Michalec, P. A. (2012). The Oppression of Experience. *Democracy and Education*, *20*(2), Article 8.

Miller, J. (2018). Can Democracy Work? A Short History of a Radical Idea, from Ancient Athens to Our World, published by FSG in the US and Oneworld in the UK; abridged version "Could populism actually be good for democracy?". *Guardian* (2018, October 12). London.

Monuk, Y. (2018). *The People vs. Democracy: Why our Freedom is in Danger*. Harvard University Press, Cambridge, Mass.

Morris, S. M. (2014). *Critical digital pedagogy and MOOCs. Presentation to OpenEd Conference, November 2014*. Washington, DC. Retrieved from https://www.oerknowledgecloud.org/content/misapplication-moocs-critical-pedagogy-writ-massive

Neill, A. S., & Montessori, M. (1966). In conversation, Redbook Magazine, December 1964, Reprinted as "Radical Private Schools". *This Magazine is About Schools*, *1*(1), 17.

OECD. (2013). *Supporting Teacher Professionalism, Insights from TALIS 2013*. OECD publication, Paris.

Peace Pledge Union. (2017). *Education for Democracy, Learn Peace—A Peace Pledge Union Project*. Retrieved from http://www.archive.ppu.org.uk/learn/peaceed/pe_democratic.html

Piketty, T. (2014). *Capital in the Twenty-First Century*. Verso, New York/London.

Portis, E. (2003). *Democratic Education and Political Participation*. Paper presented at the annual meeting of the American Political Science Association, Philadelphia Marriott Hotel, Philadelphia, PA.

Ricci, C. (2012). *The Willed Curriculum, Unschooling, and Self-Direction*. Ricci Publishing.

Roberts, J. W. (2012). *Beyond learning by doing: Theoretical currents in experiential education*. New York: Routledge.

Rorabaugh, P. (2012). Occupy the Digital: Critical Pedagogy and New Media. *Critical Pedagogy, 2012, August 6*. Retrieved from http://www.hybridpedagogy.org/occupy-the-digital-critical-pedagogy-and-new-media/

Samuelsson, M. (2018). Education for Deliberative Democracy and the Aim of Consensus. *Democracy and Education, 26*(1), Article 2.

Schunk, D., & Greene J. A. (Eds.). (2018). *Handbook of Self-Regulation of Learning and Performance* (2nd ed.). Routledge, Abingdon, Oxford, UK.

Sen, A. (2002). *Rationality and Freedom*. Harvard University, Cambridge, Mass.

Shaull, R. (1968). *Foreword to Freire's Pedagogy of the Oppressed*. A Penguin Education Paperback, London.

Stommel, J. (2014). Critical Digital Pedagogy: A Definition. *Hybrid Pedagogy, 2014, November 18*.

Retrieved from http://www.hybridpedagogy.org/critical-digital-pedagogy-definition/

Tarnoff, B. (2017). Review of Foer's World without Mind (Foer, 2017). *Guardian*, *2017*, *November 22*. London.

Taylor, R. (2015). The Ethics of Teaching for Social Justice: A Framework for Exploring the Intellectual and Moral Virtues of Social Justice Educators. *Democracy and Education*, *23*(2), Article 7.

Tedesco, J. C., Opertti, R., & Amadio, M. (2013). *The curriculum debate: why it is important today* (IBE Working Papers on Curriculum Issues). Geneva: UNESCO-IBE.

UNESCO. (2017). *UNESCO moving forward: the 2030 Agenda for Sustainable Development*. United Nations Educational Scientific and Cultural Organisation, Paris.

UNESCO-IBE. (2014). *Guiding principles for learning in the twenty-first century*. Geneva: United Nations Educational Scientific and Cultural Organisation, Paris, and International School of Geneva.

United Nations. (1989). *Text of the UN Convention on the Rights of the Child*. General Assembly, UN Office of the High Commissioner for Human Rights.

Uys, P. M., & Douse, M. (2017). *Digitisation, Learning and Teaching for Sustainable Development: Curriculum, Cognition and Context in the Digital Age*. Paper presented at the 14th UKFIET International Conference on Education and Development, Oxford, UK. Retrieved from https://www.slideshare.net/puys/digitisation-learning-and-teaching-for-sustainable-development-curriculum-cognition-and-context-in-the-digital-age

Vivekanandan, R. (2017). *Transversal Competencies and their Assessment: Perspectives from the Asia-Pacific*. UNESCO Bangkok. Retrieved January 31, 2017, from https://www.norrag.org/transversal-competencies-and-their-assessment-perspectives-fromthe-asia-pacific/

Waghid, Y. (2014). *Pedagogy Out of Bounds: Untamed Variations of Democratic Education* (p. 33).

Webb, M. E. (2002). Pedagogical Reasoning: Issues and Solutions for the Teaching and Learning of ICT in Secondary Schools. *Education and Information Technologies*, *7*(3), 237-255. https://doi.org/10.1023/A:1020811614282

World Bank. (2016). *World Development Report 2016—Digital Dividends*. Retrieved from http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2016/01/13/90224b08405ea05/2_0/Rendered/PDF/World0developm0000digital0dividends.pdf

Young, M. (1958). *The Rise of the Meritocracy, 1870-2033: An essay on education and inequality.* London: Thames & Hudson.