LET THE LEARNERS LEAD: THE WORLDWIDE TRANSITION INTO POST-DIGITAL AGE, POST-PANDEMIC EDUCATION

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ABSTRACT

Research into the consequences of and planned responses to COVID-19 across education sectors globally indicates that the considerable disruption that has occurred has significantly exacerbated existing inequalities. Although many believe that substantial investment in educational technology is the essential strategy, very few of the 200 or so documents studied embody 'radical creativity'. There is a general reluctance to seize the opportunity for fundamental change, many preferring the safety of familiar arrangements, embracing a shared desire to 'get back to normal' and to 'catch up on what has been missed'. Drawing upon that investigation, while recognising also that education was already undergoing its elemental transformation prior to the pandemic, the paramount recommendation is that the learner should lead. This involves:

- *Primary education concentrating upon the enjoyable acquisition of basic skills and third millennium learning strategies leading to a confident readiness for learning responsibility.*
- *Emphasis being placed upon schools' and systems' role in strengthening the socialisation process by facilitating a range of artistic and recreational activities, extending to play and informal wandering.*
- *Self-directed and self-regulated learning, encompassing learner-determined curricula, becoming the prevalent educational mode, from early secondary onwards throughout life.*
- *Whether in class or online, face-to-face or at a distance, teachers being enabled to come into their own in advising, supporting, coaching and encouraging (but never directing) learners.*
- *Optimum advantage being derived from universal connectivity, in the context of the duality (tangible and virtual) of contemporary consciousness.*
- *Assessment taking the form of helpful personalised feedback, confidentially to the individual learner, embodying informal testing as and when elected by that learner, as opposed to selection based upon the results of formal examinations.*

Let the Learners Lead should characterise education's forthcoming, fundamental (and COVID-19 hastened) transformation.

INTRODUCTION

This paper is based upon desk research into the consequences of and planned responses to COVID-19 across the education sectors of some sixty countries worldwide, extending to the findings of recent empirical studies, together with a review of the analyses and prescriptions of leading international organisations and the observations of some educational thinkers. In all, some two hundred documents and presentations have been accessed and analysed.

After reporting some key findings regarding the educational consequences of and responses to the pandemic, attention is given to the social features: frequently acknowledged but seldom responded to in the documents. Issues of equity and equality are then addressed, exploring the perceived centrality of examinations. Attention then turns to how EdTech may best enable apposite post-Digital Age

education for all, worldwide, taking full account of inequalities, climate change, political instability, forced migration and other challenges, as the world emerges from the current pandemic.

This leads on to a consideration of education's forthcoming fundamental transformation – within a transformed world – acknowledging how COVID-19 has focussed attention upon the significance and current state of education. The discussion culminates in a consideration of how education will be both characterised and enabled by the learner, supported by technology and the teacher, taking the lead – into that transformed situation, made essential and possible by contemporary technology.

COVID CONSEQUENCES AND RESPONSES

Varying COVID-19 school closure data are reported. Bringing these together, it is apparent that somewhere between 1.5 and 1.7 billion students globally have been 'out-of-school' for anywhere between 3 and 16 months (as in mid-2021). Around 20-30% of registered primary learners and around 35-45% of registered secondary learners participated in 'some form of online learning' for some of the time when their schools were closed. However, some 250 million school-age children were out-of-school before the pandemic appeared while somewhere between a third and a half of all primary and secondary students have no internet access. Precise claims such as "at least 20 million girls are at risk of never returning to school" and "the pandemic will cause an additional 2.5 million child marriages worldwide" (Save the Children, 2020) are sometimes contested, just as the numbers of COVID-19 cases and deaths are, in some countries, significantly under-reported. The Global Education Recovery Tracker (Johns Hopkins University *et al*, 2021) will enable more accurate measuring of the pandemic's impact on education worldwide. Let these vast numbers, while undoubtedly underlining the magnitude of the disruption, be treated with care – each individual learner is a special case and 'schooling' means vastly different things from context to context. Clearly, the consequences of COVID-19 have caused – and continue to cause – considerable disruption, exacerbating existing inequalities (within and between nations) related to wealth, gender, disability, ethnicity, geography, displacement and insecurity. The particular challenges that COVID-19 poses to girls' education is frequently highlighted, intensifying existing barriers such as gender-based violence, unintended pregnancy, the gendered burden of care work, and with boys being prioritised when it comes to access to laptops, computers and smartphones.

Few education systems worldwide had any kind of plan for dealing with a pandemic, in almost all cases failing to set standards for remote learning during lockdown, thereby allowing unequal (and typically poor quality) experiences for learners. Such plans as are now being developed and implemented are, in the majority of cases, responsive to medium-term requirements rather than long-term aspirations. In many countries, the central objective seems to be 'getting back to normal' although, as some acknowledge, that 'normal' was already becoming obsolete in early-2020. This widespread priority focusses on 'completing the curriculum' and on 'catching up on what has been missed'. Related to that, there is much concern regarding examinations, with many schools and education systems seeing themselves largely as selection mechanisms: to a varying extent, calendars, content and modes of examinations and assessments were modified, often with much controversy.

As the World Bank's Global Director for Education reminds us, we were "facing a learning crisis before COVID-19. The 'learning poverty rate' – the proportion of 10-year-olds unable to read a short, age-appropriate text – was 53% in low- and middle-income countries prior to COVID-19, compared to only 9% for high-income countries… school closures are likely to increase learning

poverty to as much as 63%" (Saavedra, 2020). This underlines the folly of focussing exclusively upon the consequences of COVID-19, given that a deeper and more longstanding challenge exists – and that more fundamental solutions are now feasible.

Christopher Thomas rises to this challenge in noting that "throughout history, periods of deep trauma have often been followed by periods of exuberant renewal… as we emerge out of lockdowns around the world to enter a watershed moment in global education" (Thomas, 2021). His recognition that "while the global agencies have spent huge amounts of money, much of the resource allocation has been driven by people in the developed world who have limited experience of living in the areas where resources are deployed" (*ibid*) is echoed (and taken further in the consideration of educational technology, below).

SCHOOLING AS SOCIAL EXPERIENCE

What has been lost by both learners and teachers during the school closures and disruptions of 2020-21 is reflected in a lack of social as well as learning experience – a friendship shortfall and a self-discovery deficit. This loss is irretrievable and that missing time of school-based emotional growth cannot be restored. Conversely, while many have suffered seriously from being denied classroom experience, some have been conscientiously taught at home and online. Indeed, one of the most common complaints has not been lack of education but lack of socialisation. While it is apparent and admitted in many documents studied that the social consequences of school closures are at least as damaging as the effects on learning, this is given very limited focus in terms of remedial action.

UNESCO reports that "school closures have brought a major disruption in the lives of children and youth, affecting their socio-emotional development and well-being, as well as their social life and relationships" (UNESCO, 2021). The World Health Organisation reported poor nutrition, stress, increased exposure to violence and exploitation, rises in childhood pregnancies, and overall challenges in mental development of children due to reduced interaction as immediate impacts of school closures (WHO, 2020). Reference has already been made to the disproportionate limitations of current online provision for girls. According to Anya Kamenetz, "many families of students with disabilities have said that their children receive limited benefit from virtual learning (Kamenetz, 2021).

As Rafael de Hoyos emphasises, "closing down schools goes beyond losing core skills – there is mounting evidence of its effects on anxiety, depression, and considerable harm to children's mental health and well-being. School closures have also been associated with an increase in suicide rates among children and adolescents…. the importance of teachers, and the recognition of education as essentially a human interaction endeavour, is now even clearer" (Hoyos et al, 2021). To enable 'catch-up', some call for learners to repeat the entire academic year, others for a focus on so-called 'key' subjects [typically language, mathematics and science: pursuits that computers are very good at!], yet others for longer school days and weekend and holiday schooling, while focussing upon the most disadvantaged and "children who have had their education interrupted or never started due to conflict, poverty, and marginalization" (UNESCO, 2021). All of this is well-intentioned but, ultimately, very depressing: no-one is calling for a catch-up covering, for example drama, music, debating, all forms of art, environmental and service clubs or recreational sport, let alone play or informal wandering.

Fengchun Miao and colleagues recognise that "students' physical, psychological, and social-emotional well-being should be prioritized over academic obligations" (Miao, 2020). Schools should involve teachers, parents, the local community and the learners themselves in designing and providing an enriched school-based social experience which offers an ongoing participative opportunity for all. In what they call the 'post-COVID-19 era', Miao's team call for the "redesign of school learning to include the best practices of online learning… a transformative opportunity for integrating technology into education at scale… teachers will know how to utilize the national platforms, conduct synchronous online lessons, organize video-based flipped learning, and use TV and radio programmes for learning" (Miao, 2020). While this certainly makes sense, let their earlier recognition of the significance of the social not be ignored in their prescription.

A similar point made by Stephen Merrill is that how we address learning loss "should be commensurate with the size of the moment" (Merrill, 2021). The need to rebuild the frayed social fabric of our learning communities, which study after study indicates is foundational to true learning, should be the paramount concern. Focusing on the social and emotional needs of the child first – on their sense of safety, self-worth, and academic confidence – is not controversial and, as Merrill emphasises, saddling students with deficit-based labels has predictable outcomes. As Anne-Fleur Lurvink explains, "by investing in social interactions, whether it is through collaborations online, social activities at school or group challenges outdoors, we can try to facilitate an environment where they can work on their positive relationships with their peers and society. After months of online education, this is what they have missed" (Lurvink, 2021). But this is what very few 'recovery plans' focus upon.

EDTECH – THE POTENTIALLY INEXPENSIVE REVOLUTION

There has undoubtedly been a significant learning loss caused by school closures. That the many remote learning schemes implemented during the COVID-19 months failed, in the majority of instances, to prevent these huge learning losses (and achieved remarkably little along the socialisation dimension) is, to a large extent, the result of many years of insufficient investment in education and systems and, consequently, having limited resilience to disruptions. Remote learning has not been found wanting – there are some indications of its success – but the problem was, rather, the inability of many schools, families, and communities to handle it properly – with restricted connectivity being a major but not the only limiting factor.

Related to that, Mary Burns notes that "digital technology has been viewed as a private versus a public good, a nice-to-have versus a must-have, a luxury versus a right… digital infrastructure is something rich countries get but poor ones cannot afford and, by extension, should not expect" (Burns, 2020). Indeed, differences within as well as between countries manifest that inequity, reflected also in the pattern of the confident originality of responses. As Lucy Foulkes puts it, "the pandemic will bring an unprecedented wave of innovation in online learning to all grade levels through the COVID-19 Digital Response. Rather than exacerbate the current digital divide or create altogether new divides, let us make sure that all of the world's learners, especially those who suffer the greatest deprivations, can benefit from these advancements" (Foulkes, 2021). Here again, this intention – seldom focussed upon in the planning documents studied – is endorsed.

Florian Klapproth and her colleagues are amongst many highlighting teacher stress and calling for their digital skills to be developed and for schools to be "better equipped with the necessary computer hard- and software, and more research on psychological factors contributing to teachers'

willingness to use technologies for remote teaching in the pandemic and beyond" (Klapproth et al, 2020). Langthaler's recognition of the implicit risk of the corporate model of education including "over-standardisation in terms of teacher training, curricula and assessments… (replacing) costly professionals by low-skilled operators" (Langthaler, 2021) illustrates the wrong way forward. She quotes the Human Rights Council's warning regarding the "risks associated with accelerated privatisation and commercialisation (including) the capture of limited public resources, lack over control of data collection, harmful practices of advertising towards children and youth as well as the long-term effects of handing over control of education to commercial actors" (*ibid*).

A tendency towards 'technological determinism' is frequently apparent, along with the notion that EdTech – though feared by a minority – is some kind of panacea. Based upon the documents encountered, education seems all too likely, and its leadership all too willing, to succumb to the superficially attractive and ultimately devouring power of big tech. There is wide acceptance that a considerable investment in both hard- and soft-ware will automatically enable learners, teachers, and education systems to be escorted into a brave post-digital new world. Even the most thoughtful EdTech strategies, such as the European Union's Digital Education Action Plan (2021-2027), go no further than supporting "the sustainable and effective adaptation of the education and training systems of Member States to the digital age" (European Union, 2020) as opposed to facilitating the fundamental transformation of education (leaving training out of it!) in response to and made possible by that very same digital technology. For as long as EdTech is seen as supplementary, as opposed to integral, as a flavour rather than a basic ingredient, such misapprehensions will persist.

Some commentators have comprehended this reality. Sarah Fuller looks at the impact and the disruption technology has had on education in the light of COVID-19 and concludes that "the pandemic has accelerated the redefinition of ICT not only as a practical tool to support learning, but also as a learning space" (Fuller 2021). As she highlights, insufficient thought has been given to how the context in which learning takes place is progressively mediated by technology along a continuum from fully in-class to fully digital, distance learning. In the classroom, resources play a key role in determining which technology is available to support student-teacher interactions. In the forthcoming learner-led situation, the issue becomes one of the students determining which technology and which teacher input will be selected by them to support their learning.

Different learners will, of course, differ in their ability and self-confidence in managing their own learning – including their choice of what to learn. As Margarita Langthaler observes, "the pandemic has brought to light the pitfalls of accelerated digitalization in terms of rising inequality and exclusion… the digital divide and the power asymmetries associated… are especially evident along North-South, rural/urban, affluent/poor, powerful/marginalised and gender lines" (Langthaler, 2021). Her call for "the acquisition of digital skills and the participation in digital education… to be viewed as a basic human right" (*ibid*) is echoed here. Simple hand-held devices and economies-of-scale tablets (containing, for instance, all primary school learning and self-testing materials) offer the potential, if planned creatively, for this to be the inexpensive educational revolution.

EQUITY, EQUALITY, EXAMINATION

Education systems worldwide – based upon weeding-out and winner-identification – are the enemies of equity and this discrimination has been intensified by the experiences of COVID-19. Disparities within and between countries may now be addressed and, in time, overcome within an inclusive, equity-driven and, eventually, universal educational framework. Inequality springs from educational

systems functioning as sieves – as selection mechanisms – as instruments of competitiveness and categorisation. Once that role is eradicated – once the objective becomes thoughtful encouragement rather than step-by-step disqualification – the inequalities of opportunity and of outcome disappear. It is no longer a race between rivals but an expedition amongst friends.

As Simon Jenkins has long emphasised, "The obsession that school is about rote learning, memory and passing exams remains. Education for life, for jobs, self-reliance, relationships, health, money and citizenship was all someone else's job – be it parents, partners, priests, or probably the police" (Jenkins, 2020). The worldwide and costly absurdity of parents spending staggering amounts annually (over eight billion dollars worldwide is estimated) on private tutors, constitutes what Jenkins recognises as a shadow industry created entirely by the tyranny of exams. It is noteworthy that China is escalating a crackdown on its online education sector, forcing once high-flying start-ups to mothball plans for multi-billion-dollar initial public offerings this year. Xi's being keen to curtail the growing influence of internet giants and concerned about hundreds of millions of parents ploughing their savings into online classes, while subjecting children to increasingly onerous workloads in the false cause of examination glory, is widely but not universally emulated.

Roberto Unger describes how the "national curriculum shackles (British) youth… by its intimate association with testing for the sake of ranking, by the value it places on the memorisation of facts and formulas to the detriment of reasoning and argument, and by its failure to prepare pupils to use information critically and to understand both natural and social phenomena by discovering how they change" (Unger, 2021). His advocacy of "a form of education that prefers the mastery of analysis and synthesis to the assemblage of dead information; that chooses selective depth over the shallowness of an encyclopaedic curriculum; that embraces cooperation among students, among teachers, and among schools and rejects the juxtaposition of individualism and authoritarianism in the classroom; and that teaches every subject matter at least twice, from clashing points of view" (*ibid*) is very much endorsed.

Which raises issues of assessment and feedback, of examinations and categorising. Informal testing with helpful personalised feedback should be the norm, geared to providing the learner with valuable guidance rather than determining 'pass' or 'fail' or involving any forms of grading. Wherever possible, selection should be self-selection. Education should be cooperative rather than competitive. And, in those relatively rare instances where many students are competing for a limited number of places, their particular enthusiasms together with their broad educational track record should determine the decision – rather than any kind of reliance upon one-off examination scores alone. As opposed to training, educational performance should be unlocked from future earnings, occupational status, and convivial working conditions: if necessary, during the transitional years, positive discrimination at selection points should be harnessed in the cause of equity (Douse, 2013).

The desire to administer diagnostic tests to identify the lag with which students are returning and to implement a learning recovery plan are understandable and, indeed, compassionate in responding to the learning needs of poor and vulnerable children. But, as Ron Berger puts it, "our obsessive need to measure academic progress and loss to the decimal point – an enterprise that feels at once comfortably scientific and hopelessly subjective – is also woefully out of tune with the moment… If there is a pressing need for measurement, it is in the reckoning of the social, emotional, and psychological toll of the last 12 months" (Berger, 2021). Similarly, it is not so much the three hundred or so untaught units of curriculum but those missing months of school-based socialisation

that cannot be restored and simply adding, say, three extra hours of traditional teaching every week for the coming academic year is no kind of answer.

Andreas Schleicher recommends that "countries need to use the momentum to reconfigure learning environments to educate learners for their future, not our past" (Schleicher, 2021). His call to build on the ongoing efforts to establish a future-oriented infrastructure for online and remote learning, and to continue to develop the capacity of students and teachers to learn and to teach in that way makes good sense. As he recognises, "effective learning out of school during the pandemic placed much greater demands on autonomy, capacity for independent learning, executive functioning and self- monitoring... there are benefits to students in expanding their learning time and learning opportunities beyond the walls of the school by being able to learn using a variety of modalities of distance learning" (*ibid*). But, to the OECD Director's recognition that "it is vital that teachers become active agents for change, not just in implementing technological and social innovations, but in designing them too" (*ibid*) we add 'and learners': even these wide words of his fail to reach beyond the pre-Digital Age of teacher-led education.

EDUCATION'S TRANSFORMATION

While many assume that schooling functions and is funded to prepare forthcoming generations for the world of work, and while some contend that it should be aimed at the wider purpose of preparation for life, there is (at least in the documents examined) limited recognition of how both work and life are changing dramatically, and how this should best be embodied in post-Digital Age education. Contemporary technology has changed – and will continue to re-shape – both employment specifically and human existence generally. The individual worker has agency and discretion previously undreamed of – and this could and should be reflected in educational systems and settings. The individual citizen is a fingertip away from a universe of information and within seeing and hearing (with instantaneous translation) distance of several billion fellow world citizens: a blossoming and potentially mutually supportive community of teachers and learners.

Yet, as the third millennium adventurously unfolds, we cling doggedly to second millennium securities. The school as we know it is a creation of the Industrial Revolution (IR). Rather than respond imaginatively to 4IR, the bulk of the Covid recovery prescriptions are still set in terms of herding learners into physical spaces to be 'taught at' in order thereafter to be 'examined at'. And, far from stressing the benefits of socialisation, the emphasis throughout the documents reviewed is on completing fairly arbitrary curricula and undergoing punishing and unreliable selection processes. Rather than seizing the opportunity offered by COVID-19 to grapple with the underlying challenges in creative and courageous ways, the preponderance of planners and decision-makers have opted for safety, seeking only the now outdated familiar, eschewing the opportunity that the pandemic presents for a thoroughgoing updating of learning and teaching in the context of post-Digital Age possibilities and imperatives.

Much has been thought, discussed, and published regarding the consequences of contemporary technology for work, for society generally and for human consciousness (see Douse and Uys, 2020). For example, the World Economic Forum's Klaus Schwab described the 'great reset' involving our 'collective imagination' and representing a "new equilibrium among political, economic, social and environmental systems toward common goals wherein this current revolution, which began with the digital revolution in the mid-1990s, is "characterized by a fusion of technologies" (Schwab, 2021).

The Brookings Institute calls for "rebuilding economic and social activity in a manner that protects public health, promotes societal healing and preserves the environment" (Brookings, 2021). Ida Auken imagined many of the crises of the early 21st century – "lifestyle diseases, climate change, the refugee crisis, environmental degradation, completely congested cities, water pollution, air pollution, social unrest and unemployment" – being resolved through new technologies (Auken, 2021).

In terms of a radical model for society, Paul Collier asserts that, "in forging common purposes, not only has everyone the right to participate, but they also have mutual obligations to contribute to those purposes. It is these obligations that generate the rights" (Collier, 2021). Contributing to common purposes provides the dignity of mutuality: everyone has an active role to play. But to contribute, people must be in a position to do so, and after decades of negligence and outdated educational provision, most are not. Rectifying that neglect, claims Collier, is the foremost practical post-Covid priority. "Equality of condition would involve parity of respect; a policy agenda that the many have set; parity of agency in contributing to it; and parity in the ability of places and occupations to make their contribution" (Collier, 2021). Within schools, within countries, and internationally, the educational visions, strategies, systems, and the allocation of human and financial resources should be geared to achieving, for all learners, that genuine equality of condition, that worldwide parity of participation. Universal connectivity, along with the elimination of education as enforced exam-driven inequality, now makes that possible, nay indispensable.

Suffice sadly to say, none of these lofty aspirations were apparent in the documented impacts, prognostications, and aspirations upon which this present paper is based. Moving towards a zero-carbon society low on consumption, high on well-being, confidently confronting the existential challenges of climate change and biodiversity loss, seems less apparent in these COVID-19 related documents than it was in their visions and missions and five-year plans issued in pre-pandemic 2016-19. Across all of the papers and statements reviewed, although many fine things have been written, said, planned and, in some cases, begun, there is surprising little of what might be called radical creativity. Within schools, within countries, and internationally, the educational visions, strategies, systems, and the allocation of human and financial resources should be geared to achieving, for all learners, genuine equality of respect, opportunity, participation, outcome and, as identified by Paul Collier, condition. In only a very small minority of the 200+ documents studied was any deep consideration of how education should respond to – and make best use of – the evolving post-Digital world economy and ways of living encountered.

LEARNERS LEADING – TEACHERS SUPPORTING

For example, it is rather remarkable that a far-sighted analysis of Artificial Intelligence (AI) and the futures of education notes that "developers need to move beyond developing tools that aim or claim to teach better than teachers, to develop instead AI tools that augment teacher capacity helping them to become the best teachers that they can be" (Miao *et al*, 2021) fails to mention learners. At least they add that "new education models are needed to put students at the centre, to move away from a focus on memorising content, to integrate the digital and the analogue, and to foster human cognitive, socio-emotional and critical skills, all of which might – with foresight and careful attention – be enabled by AI and other digital technologies" (*ibid*). Being 'at the centre' is possibly an improvement on 'at the periphery' but it is not actually 'in the vanguard.'

As Sam Mohsen recognises, "the new normal requires at least a hybrid teaching style in which online lessons and courses are held to the same standards as traditional ones. Adding that "with school lockdowns, parents had to take on the role of home schoolteachers and many of them were even less prepared than educators to keep their children on track from an academic perspective" (Mohsen, 2021). Talk of 'Personal Learning Plans,' tailored to each individual learner and monitored regularly by learner and teacher(s), are also well-intentioned. However, given that this arrangement inevitably places the main responsibility upon the learner, it necessitates an unacknowledged movement away from traditional teacher-driven and externally ordered learning, not just during 'catch-up' but more generally.

While Sarah Fuller appreciates the changing role of teachers from "recipients of training and materials to be translated into quality teaching… towards recognising that they are co-creators of education systems' responses to the pandemic and future crises" (Fuller, 2021), here again there is no recognition of this applying to learners: resilient education systems cannot be built without both adequately supported teachers and properly involved students. Related to the former, Ahmed Abdelhafez addresses the "technological fixes of teacher education and professional development during the COVID-19 pandemic" including (a) providing remote teaching support, (b) strategies for adapting to change, (c) alternative practicum experiences, and (d) supporting education for early childhood. As with other valuable contributions to the immediate challenges, his review does not extend to learner-led education let alone to the forthcoming fundamental transformation.

That worldwide dimension is vital. In the same way, contemporary technology enables the real-time partaking of educational experiences. No longer confined to specific spaces, the world has become every student's resource. All learners and all teachers may now visit, explore, share experiences, and learn and teach in creative harmony with all others. One example of how this might manifest itself is presented in an imagining of 'the global school':

> "There are about thirty teenagers in the room. Most are deeply involved with their handheld devices, type-tapping away, speaking, listening, photographing, manipulating graphics, researching, up- and down-loading, dispatching items for instant printing… Some are finalising assignments for submission; one group is building up a family history diagram on a wall screen; a teacher is attending face-to-face to another's question about genealogy. But this is not the entire class – some forty others, including mature students, are tied in from locations elsewhere, mostly far overseas, all having closely followed the teacher's introduction and, along with those physically present, proceeded in their selected direction at their own pace. This is a Caribbean History course, focussing today on indentured plantation workers. Interviews with some of their descendants are available, along with film, historical documents, virtual museum visits and other relevant materials. The learners are labouring in the fields, encountering the economics of sugar, perceiving it from the plantation owners' perspectives, and then from the workers' families', and each is reflecting upon the overall phenomenon" (Douse and Uys, 2018). Needless to say, all of these participating and self-motivated learners will have elected to take part in this particular programme – no-one made them do it and there is certainly no 'pass' or 'fail' examination at the end! Self-directed and self-regulated learning should, from early secondary at the latest, become the prevalent educational mode. This in turn, necessitates a transformation in the teacher's role, believing that "…a readily-achieved and confident familiarity

with simple devices and straightforward systems will enable teachers to focus on creative approaches, individual support and responsive coaching" (Douse and Uys, 2021). Whether in class or online, face-to-face or at a distance, teachers will come into their own in guiding, coaching and encouraging learners, with their pre-service training and continuous professional development equipping them for this evolving role.

CONCLUSIONS

As we emerge from COVID-19, those who plan, finance, manage, deliver and evaluate education should be responsibly adventurous and constructively creative to the point of incredulity. As communities collectively conceive a more radical way of living together on this fragile earth, we must facilitate the emergence of educational arrangements and processes that match those lofty aspirations. As already emphasised, many of these developments were already starting to happen before the pandemic struck and COVID-19's consequences should ideally have given great impetus to that ongoing educational transformation. Instead, there are many indications that the planned 'recovery' is less ambitious and rather more conventional that the intentions set out in documents, debated at conferences and identified as 'goals' and 'visions' and 'missions' a couple of years ago,

As the central feature of this transition, self-directed and self-regulated learning should, from early secondary at the latest, become the prevalent educational mode. Whether in class or online, face-to-face or at a distance, teachers should be enabled to come into their own in guiding, coaching and encouraging students. All learners and all teachers should take the online opportunities to visit, explore, share experiences and learn and support learning in creative harmony with all others. Resilience – particularly in relation to social support – should, from now onwards, be built into the transformed educational institutions and systems, at all levels from schools, through universities and professional associations, to national and international supervisory, support and funding agencies.

Undoubtedly, the learners should lead. Reflecting the nature of third millennium society, work, relationships and consciousness, the learners should determine what they wish to understand, become proficient at, experience and enjoy, along with how – supported by their teachers – they wish this to be achieved. The entirety of contemporary technology, with which they are increasingly familiar, is at their disposal. Moreover, as this paper's title emphasises, this self-directed and personally determined learning is not just about self-fulfilment and individual understanding. Certainly, the learners should lead. But in what direction should they lead? The learners should, it is contended, lead the transition into post-Digital Age, post-pandemic education worldwide.

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