Educational Futures Across Generations

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REDI RESEARCH FOR EDUCATIONAL IMPACT

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The Project

Mid 2020, the Centre for Research for Educational Impact (REDI) at Deakin University and the Department of Education at the University of Oslo established a website called Educational Futures Across Generations. The aim of the project was to bring together various perspectives about the future of education and to provide information to the public about the way the pandemic has and continues to impact education and learning. Scholars from across the globe were invited to submit video responses for up to three questions prescribed by the research team. Most of the 23 responses received to date, range between 90 seconds and three minutes. The website is still evolving with new contributions, and the community of video statements is intended to expand with new stakeholder groups such as teachers and principals in different countries.

The questions covered a broad range of topics including education systems and learning, curriculum principles and learning design, technology and digital learning, opinions about and ideas for policy as well as new and further research. The project generates debate around new and progressive ways of thinking about the future of education, bringing perspectives on inequality, access to resources and the role technology plays in learning and teaching. The impetus to contribute, it seems, for most scholars to date, is a desire to voice concerns about risks and inequality but to also recognize and capture new opportunities together, and to collectively imagine a new and brighter future for education and learning.

Overview

The consensus from the submissions is that education and learning systems need to adjust to meet significant social and cultural change especially:

– how teachers and students access and use technology
– in response to the disruption to face-to-face teaching
– the decline in civic responsibility of schools
– the everyday commonplace of virtual communities and digital learning.

People are moving differently through and within places and spaces of learning. As Mimi Ito from the Connected Learning Lab at the University of California, Irvine observes:

The use of new technology [is] pointing to a mode of learning that is a much more learner centered, demand driven, interest space where young people aren't reliant on going to brick and mortar buildings, sitting in lecture halls in order to gain access to knowledge and expertise, and where they have tools at their disposal, where they can share knowledge, can create content, can provide mentorship and support each other in these more peer-to-peer learning experiences.

Many contributions note that education systems were failing long before the pandemic took hold, and that the digitalization of education, although occurring at a significantly slower pace than in direct response to the pandemic, was inevitable. For many the pandemic accelerated the shift to online learning and highlighted the role internet and technological infrastructure play in young people's learning experiences and lives overall.

Professor Michael Cole from the University of California, San Diego states that:

Right before the crises our educational system wasn't doing too well. It was cracking, and not just ours in the United States, everywhere. There were massive problems with education - as a driver of inequalities, as being insufficiently powerful, not achieving enough in various countries, intranational and international massive inequalities that were associated with it. And along comes Covid and everything becomes enormously worse and it crashes.... And now the disruption is massive, how do we put it back together?...

The virus, he implies, was the trojan horse that caused an already broken system to collapse.

Human Connection & Interdependency

Considering this, it is not surprising that amid institutional fragmentation that the discussion turns to the importance of interconnectedness and human connection.

Dr Antti Rajala, a postdoctoral research from the University of Oulu states that the pandemic "makes visible the interconnectedness of humanity across the planet" and Professor Keri Facer from the University of Bristol reminds us that "our lives are distributed across and through and with other beings". We are not living through a time of individualization, she says, but rather a phase of physical disconnect. Her argument is that we must recognise the way we are interdependent beings, and the role technology plays in these relationships of interdependency:

… the idea of the rationale, autonomous individual where the sole purpose of education is to ensure they can build their own capital in order to live their rationale, autonomous, economic life makes no sense, and it makes visibly no sense in the context of this situation… To me if feels like we need a curriculum that allows for us to reflect on these dependencies, these interdependencies with our technologies and other beings… we're extended by technologies – part of me becomes part of this technology becomes part of you.

It is common now for teachers to conduct lessons in face-to-face settings and to also be prepared to shift to online learning at moment's notice. The same can be said for students. Professor Nancy Law from the University of Hong Kong believes that up until now, teachers have been reluctant to see teaching as a design profession, but that the pandemic has reinforced the need to focus and prioritise design aspects of teaching and learning. She believes the pandemic has created more instances of peer collaboration between teachers, providing an impetus for the creation of new design frameworks and platforms. Professor Armin Weinberger from Saarland University echoes Law's sentiment. He says:

We also need to know how and why things work or not. We need to continue developing and testing theories of learning and instruction and we need to tie that to approaches of instructional design and technology… not only theories informing design but also design informing theories.

Professor Mariette de Haan from Utrecht University broadens this discussion about design and technology by pointing out the problems that can arise when the infrastructure being used in education fields is not specifically created for learning and education. Not only is education at risk of monopolisation by social media and large tech companies, she argues, but there is a risk of education becoming too heavily reliant on social media as sites and spaces for learning. Where social media platforms become sites and resources for learning, then learning loses its specific purpose and place in the learning lives of young people. The question is how to reconcile both the demands of education and learning and the needs and desires of young people. We must, she says, prioritise the youth voice in our design processes:

... I predict that since we've learned that it's so easy to use technology for learning and education, that we will do more of that in the near future. And if we decide to do so, I think it's very important that we reclaim the design of these spaces for learning and education as currently most of the design is not in the hands of communities and societies but in the hands of big tech companies. Right now a lot of young people are learning, socialising, communicating, creating in platforms that are not made for education. They are made for something else, and I mean such things as TikTok, Youtube or Instagram. So, if there's one lesson we should learn from this overall presence of technology in the domain of education is that we should take back control of the design of it and especially not forget to hear the voices of young themselves in the actual redesigning of these spaces.

Collaborative Learning

A key feature of creating new systems is the presence of collaborative learning. How it is best constituted as both theory and method require further investigation:

Collaborative learning can be more effective than individual learning only if it is properly supported with ways of feedforward of expectations and scripts of collaborating as well as with real-time feedback – tools that make learners aware of the collaborative processes. (Prof. Armin Weinberger, University of Saarland).

Education is now a two-way street, unable to continue along traditional lines and underpinned by a need to exist in dialogue with other institutions and civic life. The pandemic is creating an opportunity to break down educational and pedagogical boundaries, divisions in labour and thought, and rigid outdated structure. Professor Jennifer Rowsell from the University of Bristol says that in order to move forward teachers need to work with professionals. Education in other words must link clearly to industry. She says:

… one of the ways that can happen is through collapsing silos with schools and greater society, and have teachers develop units with disparate kinds of professionals: engineers, medical professionals, welders, game designers, architects, and start to think of ways of making it far more transdisciplinary, but beyond transdisciplinary, also ways of having students do design work that feeds into their passions, gives… the freedom that they need to think and be.

Professor Jim Wertsch from the University of Washington focuses on the power of the internet and online mediated learning:

We need to think about how living in these IT environments shapes thinking, identity, group identity, possibilities to learn how to collaborate, negotiate differences and regular cognitive processes of rights and reflection. So this is a multi-tiered research agenda that require people working together, understanding what the needs and interests are at the different levels of this, and ranging from the history of media at the most general level, the sociology of media, the politics, the economics of media especially today social media down to the level of neuroscience eventually but understanding ways in which exposure to today's media atmosphere, however fragmented it is, how that is shaping the kinds of students that are growing up in today's educational setting.

Professor Armin Weinberger characterises collaboration, as a "specific quality of thinking together namely transactivity; that is to operate on the reasoning of one another". "This is true for learning", he goes on to say, "as much as it is relevant for democratic societies". A key outcome of thinking together, Weinberger argues, is that it assists people to "display epistemic trust as well as vigilance towards contributions to discourse, and of course, online discourse".

Family Background and Social Gaps

The impact of inequality and difference became very clear during community lockdowns and the closure of schools. A significant feature of school closure is the role parents, families, siblings and the home play in educational experiences. Dr Mwajama Vuzo, a senior lecturer at the University of Dar-es-Salaam, Tanzania discusses the way that social, cultural and material resources as well as parental supervision and support sets the tone for remote schooling experiences. Her words bring into sharp focus issues around equality and access to information, knowledge and resources:

Conventional systems have been challenged… students have to access education through online systems and more flexible learning systems, and therefore we have to look toward a way of combining conventional education and online learning systems, [of] how to improve homeschooling and how best to integrate parents in supporting the [sic] education systems… language in education has [always] been a barrier to learning and now we have this additional barrier, which is the use of technology, and many people don't have technology, cannot access technology and therefore… cannot access education. And so, there's some children who literally did not get any education during the time of Covid.

Students who come from more affluent families are at a distinct advantage:

And the issue of illiteracy when it comes to parents – there are parents who are not educated and therefore could not support their children during the times of Covid, and therefore what we're seeing is that those at advantage with educated parents at home, technological facilities or with better access to facilities even in their schools, for those who went back to school, were better placed than those who did not have this… (Dr Mwajama Vuzo, University of Dar-es-Salaam, Tanzania).

Furthermore, Professor Hyeon-Seon Jeong from Gyeongin National University, South Korea builds on this by bringing our attention to the importance of space and family life, and the need for effective work spaces for learning within the home. She also draws our attention to the importance of technological know-how and the comprehension of digital media platforms. Inconsistent levels of media literacy, she suggests, in both children and parents alike contribute to growing inequality:

… there are wide gaps and inequalities in how children can access, understand and use digital technology at home depending on their parents social and economic resources… children need non digital and human resources such as quiet spaces and people that can help to use technologies, and to understand the content in the situation of remote learning.

Professor Julian Sefton-Green from Deakin University defines the various ways in which the digital age can act as a magnifier of longstanding inequality and its effects:

[The way] young people experienced… the pandemic [was] incredibly different and threw an incredible and rather disappointing spotlight onto the way in which childhood is so uneven, so unfair, so unjust, so diverse, so stratified by income. The stories and the accounts of young people who didn't have access to technology, the stories of young people who were overwhelmed by technology, the stories about mental health, of isolation, but also of holding together and of connectivity and of joining up with others.

Whether digital forms of education truly democratise the field is unresolved. Dr. Rajala specifically points out the impact of the pandemic on disadvantage and minority groups. He argues:

Similar to a low tide, the pandemic makes visible existing inequity and inequality in education and in societies at large including the disproportionate effect of the pandemic on the black and indigenous communities, other people of colour and the poor. Education should focus on the root causes and should envision more ecologically and socially just alternative futures.

He goes to say that:

The curriculum principles should not be designed with a nationalistic framing in mind but should be centered on global responsibility and dialogue as well as socioecological justice at the planetary level. In particular in the global north, the curricula should be critically scrutinised for traces of colonialism and eurocentricism, and ideas from the global south should be given more prominence in the curriculum.

Diversity

Dr Marnee Shay, senior lecturer at the University of Queensland who has been an advocate for the inclusion of indigenous knowledges and practices in Australia education systems and curriculum urges us to consider new and alternative forms of knowledge and information, both in Australian and abroad, rather than relying on archaic systems deeply rooted to colonial ways of thinking, being and learning:

… now more than ever we need to look to a knowledge system and the peoples who have been on this country some 65000 years to understand how we can sustain ourselves into the future. We need to embed indigenous knowledges and perspectives in Australia but I would argue in any country with indigenous peoples because indigenous knowledges for far too long has been ignored or dismissed or positioned as another way of knowing, and what the pandemic has taught us is that we need to embrace many different ways of knowing being and doing, and in light of the Covid19 pandemic, it's a great opportunity to learn from indigenous knowledges, cultures and peoples, and it's also an important way of us coming together as Australians to do the healing that needs to happen in light of the impact of colonisation.

How to Bring About Change

Despite calls for change and the need to recognise and invest in new and progressive ways of teaching, learning and operating, Professor Neil Selwyn from Monash University, Melbourne clearly states that schools and education systems can adapt to change but to also maintain their status as an accessible public good:

I hope the pandemic will change some of the dominant discourses about education that have been kicking around the ed tech space for the past 10 years or so. We know that schools are not perfect places, but Covid has clearly demonstrated the schools and broken relics from an industrial era. Schools are not inflexible and unable to cope with change, and neither are schools unable to make innovative use of digital technology. Schools haven't handled the pandemic perfectly but then again no one has, and it's actually been great to see most school communities pull together through Covid and work out ways of using digital media to get through these emergency bouts of remote schooling. So, for me Covid has demonstrated why we need to protect the basic idea of having face-to-face schooling [and that] there is value in schools remaining to be a public good.

The power to alter or contribute to discourse and systemic change relies on the introduction of new ways of doing things – be it learning, teaching, working or socialising. This breakdown and rebirth of discourse requires governments and institutions to recognise and acknowledge that a new mode of learning that "really values the more social, near-peer mentorship, demand driven, interest driven forms of learning that young people have been engaged in, and not necessarily within the classroom but in their out-of-school lives for quite some time now with the support of new technology" (Mimi Ito, Connected Learning Lab, University of California, Irvine). Yet as we know, and as Professor Hyeon-Seon Jeong reminds us:

Teachers… in order to facilitate communication and learning through the screens of digital devices, need to make efforts to communicate with their students and to care about them still outside the screen.

The concept of care is integral to the future of education. Professor Ola Erstad from the University of Oslo discusses the way that education and learning, particularly when it occurs both within and outside of school time, is tending to lean toward education about wellbeing and self-care. This is particularly important when boundaries are blurred, and particularly when learning is mediated by global forces and technology and occurs remotely and from within the home. The question then becomes about systems of nurture, care and support:

The new national curriculum in Norway, implemented in 2020, a new transversal topic has entered across different subjects called "livsmestring" or coping with life and this is to emphasise that education is also about the wellbeing of young people. So, the pandemic has really made us aware of the need for a broader conception of the ways we learn. How we support students, learners and how life are defined as an educational issue.

Ways Forward

To fully understand the extent the pandemic impacts education systems and learning and teaching practices, we need to look closely at responses that combat inequity and promote universally sound solutions. We see this project as a platform for sharing and learning on a professional, institutional, and civic level, and we see this project as an integral step toward informing people about the way various academic scholarship can pave the way for systematic change. In the words of Professor Michael Cole:

I think the future of education is going to be the further distribution of the places and the time of education. This is not a new trend. Everybody recognises that education doesn't happen just in classrooms with 30 students or 50 students or 100 students but that it happens at workplaces, it happens in the armed forces, it happens in everyday interactions at home where parents are teaching their kids how to do things - it happens all over the place. We need to recognise that that is already the case - and now think about how do we reorganise the sort of pillars of education that collapsed with the Covid crises? Redoing the infrastructure itself is a massive task… What we need to focus on is hybrid forms of activity that create new relationships between what we think of as the domain of the family, the domain of work, and the domain of sociocultural reproduction, which is what education is about.

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