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Introduction

A unique characteristic of the COVID-19 pandemic is that it has swept over the entire globe more or less at the same time. Millions of students and teachers have experienced a push to online learning in an attempt to slow down the spreading of the virus. Education technology providers seem to have benefitted from this sudden turn of events: the Internet is suddenly filled with providers offering their services and products as a solution to the situation (Teräs, Suoranta, Teräs & Curcher, forthcoming). The global trends of digitalization and datafication of education seem to have taken a leap forward, as the critical voices are being smothered by the necessity of the situation. Education technology now looks like a saviour of the entire education sector.

However, the situation is far more complex, and the impact of the push to online is vastly different in different contexts. In this reflective piece, academics from five countries; Indonesia, Malaysia, Philippines, Ireland, and Finland share their experience with the "pivot online" as the situation is still ongoing. The reflections reveal a complex set of challenges, consisting on one hand of questions of access, digital divide and equity, and on the other hand on pedagogy, academic practice and policy.

In all five countries, the situation is likely to have a lasting impact on higher education. While we welcome this unique opportunity to develop educational policy and practice, we worry that the urgency of the situation may lead to hasty, techno-deterministic "panic mode" solutions (see also Teräs, Suoranta, Teräs & Curcher, forthcoming). This article is an attempt to look at the "pivot online" and the digitalization of education from a more critical and contextual perspective than the grand narrative of the prevailing "ed-tech speak" that has taken a boost from the COVID-19 situation.

Indonesia

Responding to the COVID-19 incident, the Indonesian Minister of Education and Culture has enacted a series of policies to ease the learning process of K-12 education and higher education. Those policies include the cancellation of school national assessment for K-12 education and the support of study-from-home for all students including the university. The K-12 school and university have been given more freedom to take necessary actions to deliver the quality of learning process on one hand and the prevention of the COVID-19 outbreak on the other hand. Online (distance) learning is the only available method to be used for supporting the study from home policy. Supporting these policies, two major Indonesia Internet providers such as Telkomsel and Indosat grant a free 30 GB access to those learning resources for all students. A number of universities and local governments also support student's and instructor's access to the Internet.

The existing minister of education and culture's online learning resources for K-12 education, <u>Home of Learning</u> and <u>Television for Education</u>, have been mandated to support the policy. The Home of Learning hosts thousands of learning objects supported by the association of Indonesian teachers and educational practitioners. In addition, a number of prominent education startups also offer free access for K-12 students. For university, the government offers a number of online learning schemes including the public access learning management system (LMS) and the opportunity of student's virtual mobility by taking online courses from other universities.

However, student, school and university capacities to take these opportunities are divided and limited to those who have experienced blended learning. Only about 50 out of 4498 universities have experienced blended learning using their own learning management system. The K-12 education profile is quite similar or even less. Furthermore, digital literacy only covers 58% of the year 15-50's population, meaning blended learning would be unlikely to provide the equitable access and privileges to online learning. As the majority of student and education institutions still rely on the face to face method, this sudden shift would not be easy for them.

Aside from these challenges there are remarkable opportunities for schools and universities to adopt online learning due to its major benefits of flexibility, effectiveness, and efficiency in terms of resource allocation. However, there is still a concern regarding the advancement of psychometric and affective domains that need hands-on learning experiences and personal engagement. Nonetheless the COVID-19 incident has created an opportunity for online learning to promisingly become a widely acceptable pedagogical method.

Malaysia

The COVID-19 pandemic is certainly one of the most devastating problems that we face today. Everyone is affected by the pandemic. The difference is how and to what extent you are affected. Education is key to the long-term solution that we need. Yet, we are facing issues particularly with young children in poorer countries who must stay out of school with very little support. Life is certainly different where the infrastructure enables you to continue, diversify, and innovate your day-to-day task online. Here lies the challenge for ensuring access and equity to every individual. The government has an important role to play.

The government of Malaysia has taken some good measures by ensuring: (i) greater transparency with regard to data and measures taken; (ii) efficient communication and enforcement, (iii) varied support that promotes greater economic equity. Likewise, the Ministry of Education and the Ministry of Higher Education are working towards introducing measures to ensure that the education process is not disrupted. Children at all levels from early childhood to university students and adult learners are studying from home through various mechanisms. (There is a concern for the support in the rural areas, but currently there is not enough information for now).

At an institutional level, our university is certainly facing business challenges much like all other private entities. While, as an Open and Distance Learning (ODL) institution, the push for a fully ODL delivery is challenging and exciting at the same time. The students are familiar with the use of e-module, technology-enhanced support materials, online (asynchronous and synchronous) interactions, digital library, and online formative assessment. As such, the switch from blended learning to fully online learning is feasible. In addition, the fully online mode offers greater access and flexibility for adult learners.

The university, through the BUKA project (Erasmus+ - European Commission, n.d.), is working towards improving the design of its online learning environment and introducing inclusive instructional design elements into its course materials, to ensure greater equity. At present, the institution is facing an immediate challenge in terms of its face-to-face summative assessments. The Centre for Learning Technology is working towards on-demand online assessment as a solution. The university is also working on several research projects geared towards digital solutions including a project on STEM. It is in this similar light that we foresee the post-pandemic world; a push towards innovation and growth in digital solutions; an accelerated change towards the 4IR (Fourth Industrial Revolution) reality. It is our hope that the experience of managing our affairs through online modes could create a greater acceptance towards ODL programmes, greater flexibility and diversity in accreditation criteria and greater collaboration with the industry.

Meanwhile, the experience at an individual level whether you are a student, an academic staff, or a support staff depends on several factors such as personality, home environment, work situation and others as all of us are now working from home. If you are a student, you would also need to study from home. This suits some and is challenging for others as individual need for space and social interactions differs. The situation at home can also be different, comfortable for some and challenging for others. At the university, the work environment is certainly not the same. Academic staff are faced with additional tasks of conducting additional synchronous forum sessions and creating additional learning material to support learners. This is important. What is clear is that the need for support and assurance among staff is equally crucial as it is among learners.

The Philippines

The sudden school closures in mid-semester due to the eruption of the COVID-19 pandemic made it necessary for higher education institutions worldwide to make an abrupt shift to online distance education. Among the many online modes of teaching, these 'newbies' are favouring video conferencing using online meeting platforms like Zoom. The appeal of videoconferencing lies in its resemblance to conventional classroom instruction where the teacher and learners meet synchronously and face-to-face, although they are geographically separated. However, this "live" teaching online poses problems for many learners — and teachers — in the Philippines.

First, it requires access to bandwidth that many do not have. In one of the regional colleges of the University of the Philippines, a rapid online survey conducted during the lockdown showed that up to 41% of undergraduate students do not have access to the internet. A similar survey of the faculty of the same college showed that while all but one faculty member has internet access, 51% of them have data caps, which means they are using mobile network-enabled internet. This type of internet connection is prevalent in the Philippines and in much of South and Southeast Asia. Prior to COVID-induced quarantines, mobile networks afforded many people a cheap and a good enough connection to the internet. But now that large numbers of people are at home simultaneously connecting to the networks, the latter are overloaded, making synchronous online teaching and learning infeasible. Thus, those with poor or no access to technology (i.e. the internet) end up without access to education.

The second problem is pedagogical. Live online teaching tends to replicate traditional lecture formats where learners are often passive receivers of information being "delivered" by the teacher. In this case learning is teacher-led and students lose the opportunity to develop independent learning skills. Distance education and online learning experts know about the affordances and constraints of synchronous and asynchronous modes of delivery and, most importantly, that the latter is not necessarily inferior to the former. While synchronous online learning can facilitate the flow of information, immediate feedback, and collaboration, asynchronous online learning gives participants more control and flexibility, and it can foster deeper learning as participants have more time for reflection (Hrastinski, 2007).

Of course, these benefits are not inherent in the technologies themselves; rather, they are the outcomes of pedagogical design. It seems that in having to make a rapid shift to online education, many academics are simply replicating online conventional class-room-based instruction. While some might be motivated by the belief that this is the 'ideal' form of teaching and learning, many simply do not know how else to teach. It is to be hoped that as the challenges of online education hit home, faculty will realize the need to critically reflect on — and change — not only where they teach but also how they teach.

Ireland

When the need to cease on-campus teaching and learning activities in the face of the COVID-19 crisis became necessary, the benefits of off-campus, flexible study became almost instantly and universally recognised. With little hesitation, most governments and institutions sought to move to remote or online teaching and learning. This is certainly the case in Ireland where it is safe to say that all higher education students are currently remote, off-campus students studying online.

All those full-time, on-campus students joined the ranks of our existing remote/online, offcampus students who have always studied through that mode. But, these cohorts of new and existing online students are not treated the same. The points below will focus on making a comparison between different types of 'first-time' adult learner in Irish higher education.

First-time, over-23, university students studying flexibly online are treated entirely differently from first-time, over-23, full-time, on-campus students, who are defined as mature students in Irish Higher Education. This is principally because those studying online through programmes with flexible progression are defined as part-time learners. This blocks these online adult learners from accessing any of the funding and support available to on-campus, full-time students who are over-23. Online adult learners are excluded from: Ireland's 'Free Fees Initiative'; the SUSI student grant funding; the Back to Education Allowance; equitable access to institutional student support and services, which tend to be designed for face-to-face, week-day, office-hour contact.

Ironically, some supports and services may now have improved as all students need to be supported through remote means. Institutions do not receive the same government funding for these students as for full-time students. The imposition of multiple barriers for these students flies in the face of stated national and international goals on bringing more adults into higher education. The current world we find ourselves in, where all students are remote, off-campus students, only brings into sharper relief existing inequities in the Irish higher education system.

Finland

The move to distance education was very abrupt and posed an unprecedented challenge on teachers' flexibility and adaptability. In Finnish education system, teachers enjoy a very high degree of professional autonomy, which means that they have been able to determine the pedagogical approach quite freely. Policy-wise, online and blended learning are not treated very differently from classroom-based education, and many teachers have already used digital tools and virtual learning environments as a part of their teaching practice. However, while some teachers were already very experienced in online learning, many others were now forced for the first time to navigate the terrain of digital learning tools, environments and pedagogies on such a wide scale. For some fields of study, the pedagogical approaches used

in face-to-face education have been very different from what is easily enabled by online tools.

Teräs and Teräs (2020) conducted a study where they invited their university teachers to reflect on their experience amidst the coronavirus situation. The teachers identified advantages and opportunities in the situation, but they also expressed concerns and threats. On one hand, the teachers believed that the situation had led to professional growth, diversified teaching practice, and a widened perspective to their work. The strong pedagogical expertise of the teachers was reflected in their stories. They evaluated distance learning tools and solutions primarily from a pedagogical perspective and appreciated those that supported good pedagogical practices.

On the other hand, they emphasised that the hurried move to distance learning had left no time for proper pedagogical design, and expressed their concern that future policies be formed on the basis of the reactive, largely unplanned solutions crafted during the urgency of the crisis. They fear that policymakers may see online learning as synonymous to self-study, and erroneously find it as a means to increase cost-efficiency. They warn against using the hastily compiled online resources as substitutes for teachers' work in the future, instead of prioritizing pedagogical development of quality online courses, and allocating adequate resources to it.

Another concern expressed by the teachers was student equity. They observed that the students with good study skills, resources and emotional support excel in online studies, whereas students with special needs, challenging life situations and less developed study skills are in danger of underachieving or even discontinuing their studies.

Discussion and Conclusion

This paper presents how the push to fully online learning due to COVID-19 has affected teaching and learning in five different countries, namely, Finland, Indonesia, Ireland, Malaysia, and the Philippines. In each of these countries, governments and educational institutions have had to leap to fully online learning in order to keep education going during the time of social distancing and educational institution lockdowns. To achieve this, they have had to find various kinds of solutions such as educational resources and ed-tech learning platforms. In some countries, also the Internet service providers have supported these efforts by giving away free Internet access with data caps.

Moving to fully online has affected different countries and regions in different ways, but there are also some similarities. Regions that have good Internet infrastructure are naturally in a privileged position and do not describe access to online learning to be a major concern. Regions with poor connectivity, however, as the certain regions in the Philippines with 41% of the students without access to the Internet, lack of access is a major issue and thus a driver of inequity. In such regions, currently, no Internet means no education. Furthermore, connectivity also affects what kind of online resources and activities can be employed to support fully online learning. With low or no Internet, live lectures or activities and resources that depend on high-speed Internet and use a lot of data are not feasible options.

Moreover, expertise in online learning is an issue. Some regions reported having low numbers of experience even with blended learning among educational institutions. At the same time, Finnish teachers and the Malaysian ODL institution reported blended learning being part of their daily routine, which has made it easier to move to fully online. As described earlier, teachers who are not experienced with different approaches to online learning often try to replicate their classroom teaching process with live lectures and content delivery. In connection to the access to the internet, relying to this approach can pose a burden on the Internet and therefore exclude some students completely. More importantly though, it is not what online learning is all about. As e.g. Teräs and Kartoğlu (2017) have noted, there are different pedagogical approaches to online learning, as there are to face to face. Therefore, "online learning" cannot be treated as a pedagogical model in itself (Teräs, Suoranta, Teräs & Curcher, forthcoming).

In addition to the access to the Internet affecting students in this situation, there are also other matters. Some students are more used to online, and some students need more campus support that might not be currently that readily available. Due to this, students who have poor study skills or problems in their life, might get left behind or even drop out. In connection this is the status of different students within education policies. Ireland reported that previously on-campus students have now also joined the ranks of remote students. Although this has taken place, former on-campus students still have better access to funding and student support services, even though their status is now the same with the remote students. This shows how jump to online also requires to rethink and possibly revise existing educational policies and how students are supported in the future.

Some of the authors in this paper predicted that the COVID-19 push to online might make online learning more acceptable in the future. Indeed, as a possibly more flexible approach to learning than e.g. campus classes, it shows great potential. This might be true but requires more thinking. For example, it begs the question, what is quality online learning really like? For example, Finnish teachers were cautious if the management saw online learning merely as a cost-efficient way to run teaching: after you have designed the course it can be reused several times and students can take it almost as a self-study module. Naturally, this is not the case. Instead, similar rules apply than in face to face teaching. Designing and teaching a quality online course takes time and needs well allocated resources. Therefore, the quick solutions developed during the time of COVID-19 crisis might not be the best way forward, but strategic, pedagogically sound development of online learning is still very much needed.

In a recent article on The Guardian, Tim Berners-Lee (2020) argued that "access to the Internet should be a universal right". COVID-19 push to fully online learning (or better yet, distance teaching) highlights the haves and have nots. Globally, students have different levels of access to the Internet and it impacts their studies. Some continue their studies with low speed Internet while some do not have the Internet at all, and therefore, no access to education. When we refer to online learning as the beautiful new utopia of tomorrow's flexible learning opportunities, we cannot say this with an honest heart when large populations are still struggling with access.

Before Internet infrastructure is made stronger in regions that have low speed or no Internet, we cannot say online learning has reached a state that provides an equal access to learning opportunities. It logically follows that local infrastructure, where needed, should be developed to provide better access to the Internet. At the same time, quality online learning does not necessarily need fancy bells and whistles that take a lot of bandwidth. For example, well-designed asynchronous learning can both accommodate low Internet speeds but also create a quality and flexible learning experience. Therefore, educational institutions should weigh if technological "solutions" are actual solutions, or if they might pose unexpected

problems later. Instead, what should be invested in for the long run, is teachers' pedagogical expertise to design and teach engaging online learning. After all, they are the ones teaching, not the technology.

References

Berners-Lee, T. (2020). *COVID-19 makes it clearer than ever: access to the internet should be a universal right*. The Guardian. <u>https://www.theguardian.com/commentisfree/2020/jun/04/covid-19-internet-universal-right-lockdown-online</u>. Accessed 9 June 2020.

Erasmus+ - European Commission. n.d. *Erasmus+ Project Card*. <u>https://ec.europa.eu/programmes/erasmus-plus/projects/eplus-project-details/#project/609657-EPP-1-2019-1-FI-EPPKA2-CBHE-JP</u>

Hrastinski, S. (2007). Participating in Synchronous Online Education. KFS AB.

Teräs, H., & Kartoğlu, Ü. (2017). A Grounded Theory of Professional Learning in an Authentic Online Professional Development Program. *The International Review of Research in Open and Distributed Learning*, 18(7). <u>https://doi.org/10.19173/irrodl.v18i7.292</u>3

Teräs, M., Suoranta, J., Teräs, H., & Curcher, M. (forthcoming). Post-COVID-19 Education and Education Technology 'Solutionism': A Seller's Market. *Postdigital Science and Education*. DOI: http://10.1007/s42438-020-00164-x

Teräs, H., & Teräs, M. (Eds.). (2020). *COVID-19 ja ammattikorkeakoulu - etäopetukseen hyppääminen ja sen vaikutuksia opetukseen ja oppimiseen nyt ja tulevaisuudessa*. [COVID-19 and University of Applied Sciences - jump to distance teaching and its impact to teaching and learning now and in the future]. Tampere: Tampereen ammattikorkeakoulu. <u>https://www.tamk.fi/web/tamk/-/covid-19-ja-ammattikorkeakoulu-etaopetukseen-hyppaaminen</u>

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