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Futuring the World, Futuring Singapore

Report on CJ Koh Webinar 2021

WEBINAR I

FUTURING THE WORLD, FUTURING SINGAPORE: PREPARING EDUCATORS FOR THE NEXT BLACK SWAN EVENT

INTRODUCTION

On the 31st of August 2021, the CJ Koh Professorship was held online for the first time ever as a Webinar Series. With the Covid-19 pandemic continually looming at hand, the theme for the CJ Koh Professorship titled 'Futuring the World; Futuring Singapore: Preparing Educators for the Next Black Swan Event' focused on how educators can better prepare themselves for future crises. A black swan event is classified as a phenomenon that is completely unpredictable, rare and extreme that can cause disastrous impacts when it occurs. In the education sector, the Covid-19 pandemic caused many disruptions for teachers and school systems, with many having to rapidly adapt to remote learning without much preparation. The theme explored the capacities required for teachers, educators and school systems and how they can prepare for the next black swan event.

To educators, it was definitely a topic of interest as many wonder if remote teaching would become the new normal as the Covid-19 pandemic persists with the threat of new variants. It was also important to know how to move forward with preparations for the next unpredictable event. In fact, the move from a physical professorship event to a webinar reflected one of the key takeaways from the theme of the webinar – where adaptation was necessary to continue the momentum and progress in predicaments of a black swan event. Three established and distinguished professors: Professor Pam Grossman, Professor Susan Fuhrman and Professor Andy Hargreaves who were previous CJ Koh Professors were invited to share their thoughts for the event. The webinar was initiated by an introduction video and an opening address presented by NIE Director, Professor Christine Goh who welcomed attendees to the CJ Koh Professorship Webinar. After a few further introductions and passing of salutations, the three panellists were ready to present their speeches.

LEADING IN UNCERTAINTY

PROFESSOR PAM GROSSMAN
31 AUGUST 2021, WEBINAR, NIE, SINGAPORE



Professor Grossman was the first panellist to present with a topic of 'Leading through Uncertainty'. She stated the importance for educators and leaders to be equipped with adaptability and resilience in trying times as black swan events are extremely hard to plan for and manage due to a lack of precedent and security. To be equipped with adaptability and resilience, there has to be a shift from routine to adaptive expertise which can be achieved through the provision of open-ended problems to come up with new solutions to practice skill of adaptivity. Design thinking was also encouraged to help develop muscle memory for those skills. To do so, collaboration with researchers, professional developers and educators are essential.

It was also crucial to lead in times of crisis. Professional developers should help leaders be aware of challenges when leading in adversity with what they might do before, during and after to respond to a crisis. Other crucial factors included the necessity to build relationships and talents to identify what takes precedence and individuals to call upon and respond to certain priorities in a crisis. Lastly, social and emotional well-being was significant to acknowledge and work through as ambiguity and anxiety experienced by individuals in black swan events were one of the most challenging aspects. As leaders, educators should be able to guide students or colleagues through their emotions and hold them in their communities so that individuals will not spiral. Through institutional holding, identifying

the works of the community, learning to respond and centring work of the community, can educational leaders hold those emotions in place as they move through critical times. A step back is sometimes required to take a better perspective of what the future looks for to respond to times of crisis.

Optimism

More and more I have come to admire resilience. Not the simple resistance of a pillow, whose foam returns over and over to the same shape, but the sinuous tenacity of a tree: finding the light newly blocked on one side, it turns in another. A blind intelligence, true. But out of such persistence arose turtles, rivers, mitochondria, figs—all this resinous, unretractable earth.

Jane Hirshfield

THE PANDEMIC AND BEYOND

PROFESSOR SUSAN FUHRMAN
31 AUGUST 2021, WEBINAR, NIE, SINGAPORE



Next, Professor Fuhrman provided the audience with three different lenses to view the pandemic. Titled 'The Pandemic and Beyond', the pandemic could be seen as an immense challenge, a scapegoat and an opportunity. Within the education sector, the abrupt change to remote or hybrid schooling without much warning and preparation illustrated the pandemic as an immense challenge. Students were similarly impacted mentally and academically in grades. Such declines were disproportionately evidential in coloured and high-poverty schools, an indication that impacts of the pandemic were unequally distributed, with the disadvantaged being more affected.

As a scapegoat, the pandemic was seen to disrupt reform efforts. The pandemic became an excuse to not work on educational reform, developments and pursuing roles that were meant to be pursued. Although challenges brought by the pandemic were legitimate, it did not mean that collaborations and developments were to be halted. Educationalists ought to find ways to circumvent the challenges faced. This leads to the final and perhaps, most interesting lens, which was to view the pandemic as an opportunity. Despite challenges, interesting developments have been observed in recovering from the pandemic. The pandemic also enabled recognition in areas that were often overlooked, such as a deeper appreciation for teachers and greater attention to emotional and social programming.

Greater demand of technology has also increased due to the increase in usage frequency. To look beyond, certain questions were raised to consider how educators can expand on opportunities and move forward with the current pandemic.. The experiences faced in the pandemic should be a learning curve to deepen partnerships from educators and researchers to provide more opportunities.

Preparing to Learn

The best way to prepare for the future unknowns:

Create and reinforce a commitment to systematic examination of key questions

Prepare educators to engage in reflection and research

Deepen partnerships with researchers in higher education and research institutes

BLACK SWAN, GOLDEN GOOSE OR BLESSING IN DISGUISE? RETHINKING EDUCATION AFTER THE PANDEMIC

PROFESSOR ANDY HARGREAVES
31 AUGUST 2021, WEBINAR, NIE, SINGAPORE



Lastly, the 'Black Swan, Golden Goose or Trojan Horse: Rethinking Engagement, Assessment and Technology After the Pandemic' presented by Professor Hargreaves concluded with certain steps towards educational reform in the broader social, cultural and political contexts. A case of 'building back better' was presented, such that the sole focus should not be on re-building health and economy but for human development as a whole: to take care of well-being, inclusivity and reduce inequality. A central focus on nature-based solutions is also required to not just re-construct education but capitalism across the world. Four points were presented to develop nature-based solutions for progress. Firstly, to be cognizant and prioritise engagement rather than learning loss. Learning loss such as high-pressured examinations and homogenised, standardised curriculum creates disengagement, disconnection, disenchantment and disempowerment which should be put away with. Engagement should be the foundation in education and methods of engaging students should be further explored to create windows of opportunities for learning. This include instilling learning that has meaning and purpose, building on attachments and diversity between schools and communities instead of competitions.

Secondly, there is a necessity to move away from austerity to prosperity for all, with a prioritisation for quality of life for learning and well-being. A consideration of ethical instead of hybrid technology was suggested, where the use of technology should be critically analysed and digital

competence should not be the usage of applications but criticality of its function. Innovation in technology should not be implemented solely for its presence, but to trial and error and slowly understand its functionality in school systems. An education ethical line should be put in place through policies for risk reduction, excessive screen-time, digital addiction and algorithms that reinforce prejudice in institutions. If technology does not adhere to the policies mentioned above, institutions should not trade with such technology. Thirdly, a huge opportunity to transform exam and testing – especially in Singapore – is presented with the current pandemic. Teachers can reduce syncretic judgements on qualitative assessment with current technology that provide instant feedback. Lastly, a more agile responsive education system instead of a top-down bureaucratic and based on compliance system would be fundamental as we live in a world of multiple, sequential, continuing crisis that includes other pandemics that will return.

Building Back Better

A central dimension of building back better is the need for a people-centred recovery that focuses on wellbeing, improves inclusiveness and reduces inequality.

It expresses a need to "reduce the likelihood of future shocks and increase society's resilience to them when they do occur", including "nature-based solutions".

OECD Policy Responses to Coronavirus (COVID-19) (2020, June 5) Building Back Better: A Sustainable, Resilient Recovery After COVID-19 <https://www.oecd.org/coronavirus/policy-responses/building-back-better-a-sustainable-resilient-recovery-after-covid-19-52b869f5/#section-d1e170>

Q&A DISCUSSION

After Professor Hargreaves's speech, there was a question and answer segment which was moderated by Professor Chang. One of the questions raised touched on practicing social-emotional well-being on educators and students in remote learning that supposedly makes it harder to pick up on the well-being of individuals. To this, Professor Grossman reinforced the need to establish and maintain connections, such as creating activities with hands on experiences the class can do together with their teachers. For example, an outdoor teacher delivered seeds to her children to plant and share their experiences of growing the plant together online. Educators also went the extra mile by driving to homes of students to check up on them. Informal gatherings and activities or setting time outside of school and learning hours was also mentioned in helping maintain, build relationships and establish that sense of connection. Problem-based learning was found to be a good method to engage kids and build resilience. It was also important for educators to practice collaboration and resilience with each other by having the proper networks and community to help sustain themselves through these times.

A follow up question put forward the usage of PDLP (personalised digital learning program) and physical education pushed into this bandwagon, considering the excessive screen-time and increasingly sedentary lifestyles with reduced physical activities was posed to the panellists. The panellists provided reminders on how ethical technologies must be put in place. Technology is a tool to be used for human benefit, rather than to be seen as a solution to human problems. This brings back the point of critically analysing technology, where digital tools should be used selectively and critically. The driving force should not be the use of laptops and digital tools but rather, innovation of these tools for the well-being of individuals. It was a common agreement that outdoor learning still provided the best form of engagement for students and more thought should be put forward with the incorporation of nature-based learnings to create outdoors as a fundamental part of learning. As such, there is a need to be careful with technology supplanting opportunities for the outdoors as possessing hardware does not necessarily guarantee that it is any good.

Another question called for certain examples from Professor Fuhrman on how to create opportunities from challenges, especially for people with inaccessible resources to technology. Creativity was brought up to find ways to utilise resources that were readily available to these vulnerable groups of people such as local libraries, religious institutions and entities. Schools could create opportunities by partnering with these entities to provide spaces and resources for remote learning for these group

of students. The curriculum could also be narrowed down by looking down at specific plans; syllabi with what worked well and what didn't; by figuring out to use technology in the most productive way. By such strategies, opportunities could be created by such challenges, especially for individuals that are more disadvantaged in education as well.

On the other hand, the next question brought up inequalities of education and what individuals could do to convince our governments to remove standardised testing. Professor Hargreaves posed the prospective to teach financial responsibility and literacy. Currently, inequalities are exacerbated by unequal wealth distribution across the globe. When students learn about financial responsibility and liability, can society begin building a fairer opportunities to proportionately distribute wealth into the public purse. It was also important to invest in more diversity and connect students socially, culturally and emotionally to engage them across their interests to try and reduce inequalities in education. Ultimately, our own communities have to be the ones that push for change. Making teachers a huge part of the conversation will play a pivotal role in the push for change.

Another question brought up how the pandemic may or may not have exacerbated or taken away opportunities for individuals to do their bit with environmental education, to which, science and knowledge were emphasised as essential topics to deal with the environment. Inter-disciplinary projects also present a huge opportunity to care for nature to engage students and getting them involved at an early age so that they have an emotional, not just cognitive attachment to it. It was also essential to be culturally sensitive by being culturally responsive and inclusive as people have different ways to engage with the environment.

Finally, a takeaway question enquired for one practice that should not be continued and one thing that educators should start doing. The key takeaway from the panellists included the need to stop mentioning how systems cannot be changed and using it as an excuse to stick to traditional methods. A shift in thinking is also necessary, such that well-being is not solely marginalised within the pandemic, but rather an on-going issue that has been exacerbated by the pandemic. Furthermore, degradation of teacher's work should be reduced with a greater realisation on their importance. Collaboration on a national level for educational progressions and improved responses was also extremely crucial.

CONCLUSION

In conclusion, the webinar presented capabilities and requirements educators needed for the next black swan event. In leadership, Professor Grossman highlighted the essentiality of adaptive expertise, resilience and optimism to lead efficiently throughout times of crisis. Three perspectives of the pandemic were next provided by Professor Fuhrman, where it was seen as a problem, excuse and an opportunity, to which, an emphasis should be focused on creating opportunities from challenges. Lastly, Professor Hargreaves expanded the discussion by connecting education to the wider social, political and cultural context. Recommendations such as ethical technology, engagement of students and shifting away from traditional to transformational educational practices were listed and encouraged.

The key takeaways for educators and professional developers was the need for more collaborations at all levels; across ministries at the national level; across researchers; professionals and educators for professional development and amongst technological developers and educators for innovation. More effective communication was essential to develop and implement proper guidelines and stability for educators so that they need not have to deal with constant practice changes in the classroom. Significance of social and emotional well-being that was especially neglected in Singapore was emphasised as well. This served as a recognition to emotional states impacting learning and teaching. Besides student emotional states, it was essential for teachers to take care and seek help for their very own emotional well-being. More spaces and ease for educators to seek help and gain knowledge on recognising a student going through mental health issues were necessary to prevent a mental toll on both educators and students. By doing so, educators can establish connections, inclusivity and ethical technology to create safe and enriched spaces for learning for the next black swan event.

WEBINAR II

FUTURING THE WORLD, FUTURING SINGAPORE: PREPARING CHILDREN FOR THE NEXT BLACK SWAN EVENT

INTRODUCTION

The second CJ Koh Professorship webinar was held on 23rd November 2021. Titled 'Futuring the World, Futuring Singapore: Preparing Children for The Next Black Swan Event', the second webinar in this series focused on students' learning as the world continues to adapt to living with the CoVID-19 pandemic to prepare them for the future, and in particular for the next black swan event. The webinar highlighted capabilities and knowledge students must attain, as well as the identities and values students should be equipped with. The panel members included highly esteemed and acclaimed professors in education, who have previously been appointed as CJ Koh Professors at the National Institute of Education (NIE). For this session, the professors included Professor Dennis Shirley, Professor Fernando Reimers and Professor Hannele Niemi.

FIVE PATHS OF STUDENT ENGAGEMENT : POSITIVE WAYS FORWARD BEYOND THE PANDAMIC

PROFESSOR DENNIS SHIRLEY
23 NOVEMBER 2021, WEBINAR, NIE, SINGAPORE



Professor Dennis Shirley introduced the topic of student engagement through the theme of 'Five Paths of Student Engagement – Positive Ways Forward Beyond the Pandemic'. He posits that the pandemic has fostered environments of student disengagement that has resulted in learning loss. Accompanied with rapid technological advancements, students became inattentive to the knowledge presented at school. He listed 5 factors that contributed to student disengagement, of which are disenchantment, disconnection, disassociation, disempowerment and distraction. He further argues that student disengagement was a crucial problem in the educational system and will even result in students being unprepared for lifelong learning.

To counter these factors of disengagement, Professor Shirley suggested some ways through examples to prepare students for unpredictable events. As a start, the curriculum should be made more relevant to the intrinsic interests of students and to help them recognise the value and importance to the subject matter that they are learning. Extra-curricular activities and school community engagement should also be enhanced to enable students to develop a sense of identity and belonging to foster bonds beyond just studying and excelling in tests in school.

The pandemic has exacerbated many challenges in our society, worsening existing inequalities, financial insecurities and health risks, especially in the educational

system. Prof Shirley argues that all these factors inadvertently created spaces for disengagement as students become easily disinterested, isolated, distracted, distant and disempowered. To keep students engaged, certain conditions should be created. A preliminary first step would be to discuss with colleagues what goes on in students' current lives and issues that they are concerned with. The next step will be to gather pieces of evidence by enquiring about what students are engaged in and disengaged with. These are the necessary conditions to engage in a world full of uncertainties and ambiguities in dealing with society, economy, environment and culture, to work together towards a shared vision and success for youths. In doing so, students can gain the skills and mentality to be better prepared for future unpredictable events.

FIVE ENEMIES OF STUDENT ENGAGEMENT

1. Disenchantment
 2. Disconnection
 3. Disassociation
 4. Disempowerment
 5. Distraction
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SEIZING THE INNOVATION DIVIDEND OF THE COVID-19 PANDEMIC

PROFESSOR FERNANDO REIMERS
23 NOVEMBER 2021, WEBINAR, NIE, SINGAPORE



On the other hand, Professor Fernando Reimers highlighted innovation dividends that can be gained during the pandemic. In his presentation on 'Seizing the Innovation Education Dividend of the Pandemic', he suggested that educators should not solely focus on losses and challenges at hand, but at the efforts to continue education and teaching amidst the crisis and against the odds. He raised examples from Brazil (Sao Paolo) and Columbia, where the education sector sought help from public universities and corporations, which together created and developed multimedia platforms to ensure continuous learning in the early days of the pandemic. In some ways, the pandemic has accelerated the adoption of some of these collaborative strategies aimed at improving the quality of education in some places.

However, the adoption of innovations from these opportunities is uneven. In some cases, issues such as economic recovery took higher priority over educational endeavours. In other circumstances, schools have also stopped face-to-face classes which resulted in certain groups of students being disengaged. These are sometimes areas that were most vulnerable and more severely impacted. Communications and partnerships were two strategies Prof Reimers suggested to help the education systems capitalise on the opportunities created by the pandemic are in. These include communication and collaborations between families, other educational institutions and the government sector. For example, this could be done by communities for teachers and peers to

connect with each other and to engage with learning from each other.

Professor Reimers also encouraged educators to use the opportunity to consider the development of policies which have not been developed before or to reintroduce curricula that were not implemented previously. Opportunities should be based on the principle of not leaving any stakeholder behind, accompanied by the need to assess the gaps in educator and student well-being to improve the resiliency of the educational system, as a way to prepare for future black-swan events. These should be conceptualised for the future needs of the educational system. Although the pandemic is a time of great loss, the lessons learnt can be examined and we can recognise it as a time to try things differently.

Influence of COVID-19 on Education

Austerity (Governments)

Austerity (Individuals)

Interruption of Schools (Learning Loss)

Multiplier effects of Pandemic on other challenges

CAN WE PREPARE CHILDREN TO PREDICATABLE OF UNPREDICTABLE EVENTS IN THE FUTURE? THE FINNISH PERSPECTIVE

PROFESSOR HANNELE NIEMI
23 NOVEMBER 2021, WEBINAR, NIE, SINGAPORE



Utilising the pandemic as an opportunity was also featured in Professor Hannele Niemi's discussion on "Can we prepare children to predict unpredictable events – The Finnish perspective". Distance learning during the pandemic in Finland was made possible by implementing strategies such as the adoption of educational devices that provided all forms of subject matter for the students' learning. For students with special needs, the schools remained open with different teaching arrangements depending on the choice of parents. These were all arranged within three days of the announcement of school closures due to movement restrictions. The lesson from Finland's quick response to the pandemic illustrates the efficiency and resiliency of their educational system.

Professor Niemi attributes this efficiency to the level of autonomy teachers have. Teachers in Finland take on the role as decision-makers and instructional planners, in curriculum planning and implementation. Additionally, schools have existing e-communication platforms which accelerated the transition to remote learning. The teacher's autonomy in design and implementation allowed them to come up with adaptive strategies to ensure that students were coping well with distance learning. Consequently, teacher autonomy is necessary in helping teachers prepare student for such black swan events. Nevertheless, there are still some challenges such as the missing social elements of school in online learning, inequalities among students with regard to their access to resources, unevenness in teacher capacity and the issues of well-being among students and teachers. She suggests that the curriculum is also an important consideration to prepare students for the future.

To prepare for the long-term uncertain future, Professor Niemi elaborated on the need for 'transversal competencies' to be inculcated through subject matter knowledge and multidisciplinary modules, featured in the Finnish core curriculum. A total of 7 key transversal competencies can be found in the core curriculum. Overlapping across different subject matters, they include taking care of oneself and others, cultural competence, multi-literacy competence, Information Communication Technology (ICT) competence, competence for the world of work, participation in sustainable action and lastly, thinking and learning to learn. One such example is the application of technology that is transferrable and integrated into all subjects. Application of technology is integrated through the ICT competency, where digital technologies are applied to student learning and practiced in normal day-to-day activities and for future work purposes. This is a crucial skill for students, especially in times of uncertainty, such like during this pandemic. Another example is how sustainable action and positive futuring can help students cope independently, collaboratively and engage with problems at hand critically and diversely. Transversal competencies encourage students to develop multiple viewpoints and perspectives, creating more opportunities to be engaged with social and community issues.

Professor Niemi further suggest that schools can be a learning community for students to participate in the planning process of their own studies so that they can experience the autonomy of devising their day-to-day studies, independently and as a team. In sum, teacher autonomy and a curriculum that includes transversal competencies are ways that the Finnish education system have helped students prepare for the next black swan event.

Q&A DISCUSSION

Next, the question and answer segment commenced with a question on how teachers should navigate rising online pedagogical demands, social inequality and disparity and to translate them to learning environments. To this, Professor Niemi highlighted the importance of collaboration and communication among teachers to navigate these demands. She reiterated the need to give students more independence and autonomy to overcome certain problems themselves instead of placing worry on how they should navigate every student adaptability demand.

Building on Professor Niemi's answers on collaboration, Professor Reimers highlighted how aspects of a child's learning should not be placed solely on an educator, but rather that learning should occur within an ecosystem. The lack of collaboration has resulted in a lack of skills teachers require to teach. He gives the example of the case of climate change, where most teachers do not understand the science behind climate change due to limited partnerships with experts in the subject domains of physics and chemistry. Although collaborations are essential, Professor Shirley suggested how it can be hard to do so as teachers were trained in a regime of testing but are suddenly expected to change from how they have learnt in the past. He also suggested that standardize testing often do not assess other competencies that students acquire in other areas of learning. Priorities in learning should be placed on student well-being and in gaining a broader sense of what it means to learn in our society. Student survival needs should also be similarly emphasised due to large number of youths that are physically and mentally unwell. Education can be reimagined to cultivate a balance between academic achievements and other aspects of a child's development, where students are able to gain hands-on experience and physical exercise in the outdoors and having more time to explore the arts.

Another question posed by the audience was on the key learning points from the transversal competencies in the Finnish curriculum. Professor Niemi shared that the fundamental outcome in these transversal competencies was to encourage student agency. Multidisciplinary modules where project and design-based work are mainly exercised in replacement of standardised testing encouraged students to make their own projects and plan together. This allowed them to experience active work such as planning and assessing their own projects to achieve tasks and projects. Through this, students were also able to learn independently while being continuously engaged. Most importantly, essential future skills such as collaboration, independence and teamwork are developed. This will create sustainable practices for students to prepare for the next black-swan event.

The panel also advises educators to work towards a more centralised and horizontal educational model. Collaboration and dialogue across different stakeholders is necessary and must adopt a critical approach, such that the teams are probed to delve deeper into efforts made during the pandemic to shift away from regimented testing methods. Greater autonomy should also be given to teachers, to work together with politicians to create sustainable educational structures in society. These strategies, working through different scales at the micro, mid and macro levels can also include efforts across different domains of society including health and education to cooperate, and work on the well-being and future needs of their students to gain skills for future unpredictable events.

CONCLUSION

The webinar has offered perspectives for us to consider the opportunities that the pandemic has presented. These opportunities can offer ideas to teachers, educators, and policymakers to come up with innovative solutions. By redirecting educators' focus and cultivating effective communication among the various stakeholders, more opportunities can be created for educators to motivate students to learn, help students learn better, to prepare for the next unpredictable event.



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