

### Vol.4 No.2 (2021)

## **Journal of Applied Learning & Teaching**

ISSN: 2591-801X

Content Available at : http://journals.sfu.ca/jalt/index.php/jalt/index

# Editorial 4(2): Black swan or grey rhino? Reflections on the macro-environment of higher education during the pandemic

Jürgen Rudolph <sup>A</sup>	Α	Head of Research & Senior Lecturer, Kaplan Higher Education Singapore; Co-editor-in-chief, Journal of Applied Learning & Teaching
Shannon Tan <sup>B</sup>	В	Research Assistant, Kaplan Higher Education Singapore; Journal Manager, Journal of Applied Learning & Teaching
Tania Aspland <sup>C</sup>	С	Professor and Vice President, Academic, Kaplan Business School Australia, Co-editor-in-chief, Journal of Applied Learning & Teaching
		<b>DOI:</b> https://doi.org/10.37074/jalt.2021.4.2.1

#### Introduction

2021 was yet another hapless year dominated by the pandemic. Early on, the pandemic had morphed into what may be best described as a polycrisis (a convergence of multiple intersecting, simultaneously-occurring crises: Tooze, 2021): not just a health crisis, but also economic, social, political and educational crises; a "crisis like no other" (IMF, 2020), or "the real first world war" in the words of Ecuador's ex-president Lenín Moreno (cited in Tooze, 2021, p. 8). Covid-19 may also be described as the first major crisis of the Anthropocene (an era defined by the fallout from our unbalanced relationship with nature), and the next crisis may just be around the corner. As we live in an age where we are constantly bombarded with data (organised into information, misinformation, and disinformation), we found ourselves wondering what, from a big picture perspective, has been happening globally as a result of the pandemicinduced polycrisis, and use this editorial as an opportunity to take stock of the fast-changing macroenvironment of higher education.

The pandemic has witnessed JALT publications since April 2020. A JALT article by Crawford et al. (2020) was at the vanguard of global academic journal publishing on higher education and the pandemic and has delighted us by garnering averagely around two citations per day, recently hitting in excess of 1,000 Google Scholar citations. This pioneering article that provided an early snapshot of 20 countries across all six World Health Organization (WHO) regions has been followed by many other JALT articles on the unfortunate topic, amongst them: Kefalaki & Karanicolas (2020) on countering fake news on COVID-19 with education; Sutton & Jorge (2020) discussing the potential for radical change in higher education as a consequence of the pandemic; Butler-Henderson et al. (2020, 2021) providing a COVID-19 in Higher Education Literature Database (CHELD) that systematically reviewed academic journal articles in 2020 across two instalments; and Hawley and 19 co-authors (2021) discussing COVID-related concerns of

college students in three continents. In addition, we had country-specific articles on Mozambique (Martins et al., 2021), Singapore (Rai, 2020; Grafton et al., 2021), Sri Lanka (Maddumapatabandi & Gamage, 2020), the UAE (Alterri et al., 2020), the UK (Mulrooney & Kelly, 2020), and the U.S. (Mshigeni et al., 2021).

We also discussed the pandemic in previous JALT editorials. After apparently having been eerily prescient in discussing Nassim Taleb's (2005) black swan concept in the December 2019 editorial (Rudolph & Yeo, 2019) - more about this shortly - we felt compelled to discuss the pandemic in all subsequent editorials. While rereading these editorials, we rediscovered many important themes that also remind us that higher education does not exist in a vacuum: growing inequality within and between countries (Rudolph, 2020; Rudolph & Tan, 2021); and the dismal performance of populist leaders during the pandemic (Rudolph, 2020; see also Rudolph, Ching, et al., 2021). There were also increased academic productivity (Rudolph, 2020), surreal conference experiences (Rudolph & Tan, 2020), emotional responses and mental health concerns (our own emotional roller coaster vacillated between angst, numbness, hope and euphoria: Rudolph & Tan, 2020, 2021).

In this editorial, we take up some of these red threads and specifically wonder about some of the big numbers (fatalities, unemployment, and disrupted education), the uneven impact of the polycrises on gender, class (and race) and nations, whether this was a black swan or a grey rhino event, and the hope for endemicity. We then use these macro-environmental meditations to come up with some recommendations for learning & teaching practices in higher education, before we introduce the latest issue of JALT. There is a growing number of books on the pandemic (e.g. Zakaria, 2020; Micklethwait & Wooldridge, 2020; Tooze, 2021), and we found Adam Tooze's brilliant account in *Shutdown. How Covid shook the world's economy* of a particularly high value. The paragraphs below are necessarily snapshot-like

musings and, for more major efforts, we refer you to the above-mentioned literature and our references.

The Economist (2021a) recently estimated that Covid-19 has thus far killed 17.3 million people. With fatality statistics being chronically unreliable in numerous countries, 17.3 million is a much higher number than the ones found elsewhere (it is based on excess mortality). Such numbers, though indubitably frightening, are highly abstract and do not even begin to tell the story of the innumerable and often untold sufferings around the world. We could add that over three billion adults were furloughed or struggled to work from home during the first half of 2020; 100 million people worldwide were thrown into abject poverty in 2020; and 1.5 billion young people had their education interrupted (Tooze, 2021). Covid-19 also came with other undesirable superlatives: the pandemic may be the starkest example of globalisation yet - not only did the virus spread rapidly around the globe, most global economies also contracted simultaneously (Tooze, 2021). Economies suffered spectacular shocks, with for instance the UK economy suffering the worst recession in 300 years (Chan, 2020). From an environmental perspective, no thanks to the explosion in the use of face masks, plastic gloves and visors, Covid-19 has led to a "pandemic of plastic pollution" whose effect will linger in global landfills and oceans (The Economist, 2020). Things could have been even worse if global central banks had not provided an unprecedented \$14 trillion worth of support by the end of 2020 (Tooze, 2021). Another unparalleled superlative was that there had never been a vaccine for any coronavirus and yet vaccines were simultaneously developed, tested, and manufactured and then deployed faster than ever before (Tooze, 2021).

In addition to pondering over these macro-events and the gigantic numbers associated with them, we can only get a fuller picture of these nightmarish times when remembering the horrible images from Wuhan, Bergamo (Italy), Queens (New York City), and the Ecuadorian city of Guayaquil. In an era of short attention spans, we may have forgotten the horrors of triage, and the images of exhausted nurses, overflowing morgues, and corpses laid out in body bags and makeshift coffins in the street.

The coronavirus had also very different impacts depending on one's gender, class (and race), and country of abode. The coronavirus recession was gendered in its impact and has hence been called a 'Shecession' (Gupta, 2020). For instance, in both Europe and the U.S., "women workers in the bottom quintile of the income distribution suffered the largest loss of employment" (Tooze, 2021, p. 101). In addition, hundreds of millions of working families had their childcare arrangements disrupted, and the additional burden of care was shouldered overwhelmingly by women (Tooze, 2021).

Pandemics expose the gulf between the have-nots and haves and a pandemic's economic burden falls most heavily on the poor (*The Economist*, 2021b). The unparalleled scale of government interventions (with central banks spending US\$14 trillion globally by the end of 2020) was a somewhat paradoxical revolution. It was deeply ironic that conservative administrations in numerous countries took radical measures long demanded by leftist politicians. Bullough observed:

"But they were doing so not to build a new society, but to preserve the old one... For progressives, this is depressing. The state can still use its powers to do huge things but it can apparently only use them in the service of the powerful and the wealthy. As soon as their crisis is over, those powers will be put back in their box" (Bullough, 2021).

Whilst it was, for instance, innovative to issue generous cheques to help badly-off U.S. citizens, the purpose of the entire spending package was explicitly conservative. And the result of the trillion-dollar spendings of central banks around the world was a supercharged rebound of the financial market, "handing literally trillions of dollars to the better-off members of American society" (Tooze, cited in Beauchamp, 2021). In fact, stock markets began to rally as early as late March 2020. Whenever central banks cut interest rates in response to a stock market crash, they elevate asset markets. As Tooze writes about this effect in 2020: "The affluent 10% in advanced societies who hold the most financial wealth received a stimulus that dwarfed anything openly declared in the public accounts" (Tooze, 2021, p.150). On the other end of the socio-economic spectrum, Tooze (2021, pp. 229-230) reported for the U.S. "an epidemic of shoplifting for food" and that, in November 2020, "a quarter of out-ofwork Americans with children at home had not had enough to eat", and "a fifth of the Black population reported going hungry".

If such a gulf between the haves and have-nots can be described for what is often referred to as the world's most prosperous country, one justifiably fears for poor countries. Once the coronavirus becomes endemic in rich countries, there is the danger that they will lose interest in it and the "disease it causes risks becoming a poor-country killer", like so many other diseases (*The Economist*, 2021c). Poorer countries tend to have lower vaccination rates, and consequently, a "disparity of outcomes between rich and poor countries will emerge" (Loder, 2021).

Reverting to our earlier comments on the coronavirus pandemic having been a black swan event, we have reason to cast some doubt on the suitability of that metaphor upon further reflection. Whilst a black swan event refers to an unforeseen and unlikely occurrence that typically has extreme consequences (Taleb, 2005), the complement to a black swan event is a charging grey rhino – a highly obvious yet underestimated or even ignored threat (Wucker, 2016). A black swan event gives us the excuse that 'nobody could have seen it coming' (as it is something that we didn't know that we didn't know), whilst a grey rhino problem implies that many people warned about an obvious danger that was unfortunately ignored (we knew that we knew about the danger).

In Adam Tooze's analysis, the pandemic was "blitzkrieg Anthropocene: problems coming at us in a matter of hours, days, weeks" (cited in Beauchamps, 2021). The million-dollar question is whether or not we could have foreseen another pandemic coming from East Asia, a "region of dense interaction between wildlife, agriculture, and urban populations" (Tooze, 2021, p. 5). Generally, our modern way of life – our "use of land across the globe, relentless

incursions into the remaining wilderness, the industrial farming of pigs and chickens, our giant conurbations, the extraordinary global mobility of the jet age, the profligate, commercially motivated use of antibiotics, the irresponsible circulation of fake news about vaccines" (Tooze, 2021, p. 31) - brings about new disease threats. After SARS (2003), the avian flu (2005), and the swine flu (2008-9), a "consensus was emerging among virologists that the lottery wheel of zoonotic mutation was being spun at ever closer intervals" (Tooze, 2021, p. 46). In 2020, further shocks of the Anthropocene also did not arrive in a neat sequence: there was the strongest ever cyclone, and there were gigantic typhoons, flash floods, hurricanes, Antarctica's glaciers breaking apart, Siberia's permafrost thawing, a succession of horrifying wildfires, and the list goes on (Tooze, 2021). In Tooze's evaluation, "the coronavirus cruelly exposed the deep incapacity of most modern societies to cope with the kinds of challenges that the era of the Anthropocene will throw up with ever-greater force" (Tooze, 2021, p. 292).

Not reacting to a two-ton rhinoceros that comes charging at us is apparently the worst thing we can do. Instead, we need to engage more thoroughly with reality, recognising threats and our own biases, and work to overcome them (Wucker, 2016). Whatever animal metaphor one may prefer – black swan, grey rhino, 'the elephant in the room', or an ostrich sticking its head in the sand – Tooze regards our failure to build adequate defences against global pandemics as a gargantuan "market failure", comparable only to "the failure to attach a price to the costs of CO<sub>2</sub> emissions" (Tooze, 2021, p. 34). Not only was the lack of preparedness deplorable, but the consequences of ineffective responses were also exceptionally high death tolls (Lindhout & Reniers, 2020).

Viruses very rarely get eradicated (the only laudable exception appears to be smallpox), so it is more realistic to consider when the pandemic will become endemic. At present, half of the global population has some kind of immunity (being either at least partially vaccinated or having been infected with Covid-19), but most countries are still a long way off from endemicity (*The Economist*, 2021a). The coronavirus will thus remain a formidable foe in 2022. Mutation is a clear and present danger, with the Omicron variant having emerged at the time of writing.

Coronavirus vaccines appear to come close to a magic bullet that usually does not exist. Guest (2021) has argued that "the smartest thing any government can do in 2022 is to roll out vaccines". While not all vaccines are equally effective, it would appear that "all of them are far better than being infected", and with 25 billion doses projected to have been produced by June 2022, it is hoped that global supply will be less constrained (*The Economist*, 2021c). Insisting on vaccine passports may change the minds of anti-vaxxers.

At the risk of sounding platitudinous, it would appear to us that in these times of polycrisis, education has never been more important. In a forthcoming article (Rudolph, Itangata, et al., 2021), we have made some recommendations as to how higher education should respond to the pandemic that can be summarised in four points.

- 1. There is a predominant fallacy to look at technology as a panacea. However, technology must not be isolated from sound pedagogical practices, such as the constructive alignment of learning objectives, teaching and learning and assessments (Biggs et al., 2019), student engagement for critical thinking (Brookfield et al., 2019) and the enhancement of metacognitive competences. Whilst it is obviously apt to employ technology in the classroom to increase student engagement, we would like to emphasise with Stephen Brookfield (2015) that credibility and authenticity remain of supreme importance.
- Higher education institutions need to have the basic ICT infrastructure for online learning and provide access to applications and learning platforms to their staff and students (Ali, 2020). These main stakeholders of higher education require continuous online training that emphasises basic and advanced functions of online learning platforms, student response systems and other educational technologies.
- 3. Multi-perspectivity on learning and teaching in higher education is encouraged. Rather than evaluating teaching and learning success only through student evaluations, it is more meaningful to view them through four lenses: students, peers, experience and theory (Brookfield, 2017).
- 4. Although there has been some resistance from accreditation bodies and there have been online proctored exams, COVID-19 has led to a reduction of examinations and a trend towards more open-book exams (Rudolph, Tan, et al., 2021). A reduction in closed-book exams is perhaps one of the few positive developments that the pandemic has brought about, leading potentially to more authentic assessments, more real-world examples and advice, and more industry partnerships as well as co-curricular employability training.

We thus recommend to keep adhering to established principles and practices that served higher education institutions well pre-pandemic and that continue to provide foundational underpinnings. In higher education, there have been many artificial separations between stakeholders those between students and lecturers and between lecturers and non-teaching staff (and full-time faculty and casualised adjuncts). With the nature of the pedagogical relationship having shifted towards commercialism, a near-derogatory narrative towards students has evolved in some of the literature (see the interview with Peter Fleming in this issue). However, in order to improve the learning and teaching experiences, all stakeholders need to work together. Good practices include student-staff partnerships that may involve students' active learning, subject-based research and inquiry, scholarship of teaching and learning; and curriculum design and pedagogic consultancy (Harrington et al., 2014; Rudolph, Itangata, et al., 2021).

It is now our pleasure to introduce our latest issue of JALT. It contains the usual mix of research articles, interviews, EdTech and brief articles as well as book reviews, Anne Palmer's "Investigating staff views on plagiarism in transnational higher education" kicks off the research article section. Palmer investigated perceptions on plagiarism of teaching staff at four Australian universities through surveys and interviews. Her findings indicate that staff training on plagiarism has room for improvement. It is crucial to have interaction between unit coordinators, tutors and students to ensure and sustain academic integrity within transnational higher education.

Next, we have Willmann Liang's article, entitled "Customised study companion improves student exam performance: a retrospective study in an undergraduate medicine course". Liang analyses the relationship between the use of a customised learning tool and medical students' exam performance and he also incorporates student feedback on the tool. The customised "Study Companion" integrates key analgesic pharmacology contents from several major textbooks. The findings show that the medical students in Hong Kong who utilised the learning tool were more likely to score higher in pharmacology questions as compared to non-users.

The following four articles focus on Covid 19 and higher education. Musharrat Shabnam Shuchi et al. investigated students' online learning experience in a Bangladeshi university. Their findings show that online learning has been advantageous in some respects, such as easy accessibility, flexibility, cost-saving, reducing the likelihood of semester loss, and learning new technologies. However, there were also major disadvantages: network problems, difficulties in understanding the topic, unsuitability for mathematical courses, concentration problems, non-interactive classes, financial constraints, adverse health impacts, device and internet problems. As the disadvantages outweighed the advantages and in order to create a student-centric, conducive learning environment amidst the pandemic, it was suggested that universities review their policies in providing greater institutional support.

The second article on Covid and HE is a contribution by Omona Kizito, titled "Effects of school closures in COVID-19 era: Evidence from Uganda Martyrs University". The researcher examined the effects of school closure in Uganda on multiple stakeholders: lecturers, students, administrators, and community members. A phenomenological study was carried out and results show that the impact of the closures on teachers resulted in financial distress and changes in their profession. Such changes affected students' learning and saw detrimental outcomes in the growth and development of Uganda's higher education system.

Another valuable perspective to online education is by Robyn Moore and co-authors. In "Supporting casual teaching staff in the Australian neoliberal university: A collaborative approach", the researchers examined the recent intensification in online teaching in the context of the pandemic and argue that articulating an effective model of online teaching is judicious. Using a collaborative autoethnographic framework and reflections from past

and present members of the teaching team, Moore et al. arrive at such a model. Results showed that regular productive interactions between staff are crucial for their overall wellbeing. It is concluded that collaborative teaching models provide a blueprint for a supportive and enriching environment for staff and are beneficial for the long-term viability of institutions.

A fourth piece on the pandemic is provided by Jodi Haines and Bill Baker, entitled "Australian Aboriginal education: The impacts of Riawunna's Murina program pedagogy during Covid-19". The authors examined how students in the Murina Program were supported by the Aboriginal and Torres Strait Islander Education Unit, the Riawunna Centre at the University of Tasmania, to help overcome the challenges of Covid-19 in 2020. The analysis of formal institutional level student feedback surveys suggest that Murina students very much valued the support provided by all Riawunna staff during the pandemic as highly critical to their engagement with Aboriginal pedagogy, through the sharing of Aboriginal knowledges and yarns within a curriculum that strengthened connections during this challenging period. Ongoing research in this space will continue to investigate the impact of the Murina Program pedagogy to give students voice and agency.

In order to include the fifth and final piece on HE and Covid-19 in our overview, we temporarily depart from our discussion of contributions in sequential order. In this brief article, Sayan Dey and Pratiksha Alamman discuss the impacts of Covid-19 on students' knowledge scape and behaviour in India. The pandemic has generated biomedical and various teaching and learning crises. This is due to the inconsistency in class attendance, the unsystematic methods of assessing students, the mockery of the students as 'Covid batch', and the career insecurities of the students. Such circumstances challenge researchers to critically re-investigate and readdress the unethical evaluation practices within a broader framework of the factors that contribute to the unequal systems of knowledge production within the higher educational institutions in India. Based on these arguments, the article discusses the various factors that provoke both teachers and students to indulge in such unethical practices during Covid-19; the consequences they encounter; and the possible methods to overcome such challenges.

Apart from the papers on Covid-19 and HE, there is a refreshing breadth of themes across the remainder of the issue. In Cotterell Danielle's article, she investigates learning routines, student motivation, and academic achievement in the primary years of an independent South Australian school, and asks: "Is there still a place for teacher-led learning routines in the Australian primary school classroom?" In her findings, it was presented that the way teachers establish effective learning routines does have more influence on student motivation, academic achievement and students find it engaging and relevant. Cotterell also showed that establishing learning routines are a greater and consistent predictor of student motivation and academic achievement. She recommends that teachers reconsider what motivation is and that the government should promote and support the quality of teaching.

Next, Anupama Ghattu et al. (2021) discussed the usage of experiential learning in improving students' logical thinking and problem-solving skills, by implementing an integrated theory lab approach to a freshman C Programming course. An experimental research approach was used to examine the effects of the integrated pedagogical strategy. The results showed no statistical significance pre- and post-test. Despite this, the classroom activities increased hands-on practice time and regular formative assessments showed that students' programming competency (including logical thinking and problem-solving skills) improved through this integrated approach.

Caleb Or and Elaine Chapman's article on "An Extended Unified Theory of Acceptance and Use of Technology Model for Education Contexts" reviewed previous work done on the UTAUT model. UTAUT studies have mostly focused on educational technologies like learning management systems, mobile learning, instructional devices, online collaboration tools and educational services. The researchers propose an extended model to study educational technology acceptance by introducing additional constructs such as usability, learnability and attitude. They also encourage future researchers to examine alternative measures of intention and behaviour in revalidating or extending the research to other contexts.

In this issue, we also resume our interviews with educational thought leaders. Under the header 'Never let a good crisis go to waste', we interviewed Professor Peter Fleming on dark academia, the pandemic and neoliberalism. Fleming elaborated on his despondent views on the future of universities, which are espoused in his most recent book, Dark academia. How universities die (2021). In a devastating critique, he argues that universities were already in crisis prior to the pandemic, but that has been exacerbated by it in the context of neoliberalism and shrinking government budgets, especially in key higher education-exporting countries such as the U.S., the UK and Australia. Apart from our focus on the state of higher education in this interview, we also, amongst other things, discuss Fleming's nuanced critique of work as well his exciting future projects.

Mary-Ann Shuker and Rob Burton's article provides an educational technology review of Padlet and how we can bring people and ideas together with this tool. They explore the advantages and usefulness of Padlet for both students and academics. Padlet allows students to engage in self-directed learning while maintaining peer interactions regardless of whether it is in a physical or online context. The authors demonstrate the various tools that encourage student learning, while providing feedback to teachers about their learning gaps.

The first article in the brief article section is Paul Dylan-Ennis's article on "Teaching cryptocurrencies as cryptoculture". Dylan-Ennis argues that rather than solely focusing on technical or financial phenomena, a cultural approach is similarly relevant. He encourages teachers to establish a shared public commons inhabited by the community of a cryptocurrency, and build on this sense of place by then revealing to students the cultural context of a cryptocurrency. Consequently, different cryptocultures can be analysed

through an examination of the competing environmental imaginaries of Bitcoin and Ethereum.

The next article by Margarita Kefalaki has the title "Communicating through music: a tool for students' inspirational development". Kefalaki discusses examples of how people can achieve goals and become a great source of inspiration, and this could be achieved by incorporating authentic projects and ideas into K-12 and higher education curricula. Her case study presents the creation of a multicultural compact disc in three languages (Greek, Corsican, and French) as an attempt to add to the inspirational development of students to aid teachers to achieve overall educational aims.

This issue is completed with four book reviews. Gary Saunders reviewed *Resisting neoliberalism in higher education. Volume 1: Seeing through the cracks*, a volume edited by Bottrell and Manathunga. The book documents, and reflects in detail, authors' experiences with the neoliberal university in the Australian context. Furthermore, it provides hope that there are cracks in the neoliberal university within which resistance, struggle and the prefiguration of alternative forms of higher education provision can be experimented with. The autoethnographic accounts capture the difficulties and struggles that the authors face and how they resist the imposition of neoliberal reforms within higher education.

Nigel Starck reviewed Roulston and deMarrais's Exploring the archives: A beginner's guide for qualitative researchers. Starck deems the book suitable for novice researchers looking for a general introduction into how diverse collections can be explored. Furthermore, it offers useful and thorough guidance on the usage of various types of archives. Starck encourages readers to read Roulston and deMarrais's work and use it as a stepping stone to a smooth exploration of the archives.

Zerin Jannat reviewed Daniels and Minot's An introduction to statistics and data analysis using Stata. The book provides a detailed step-by-step approach to research processes via the use of a statistical software, Stata. She shares insights into the book and recommends this practical and engaging work also for its simplicity of language and content. The final book review is by nelson ang on The Oxford handbook of the history of education, edited by Rury and Tamura. Ang marvels at the inevitably interdisciplinary field of educational history and elaborates on its manifestations in a multitude of diverse theoretical frames. In Rury and Tamura's tome, the rich and fascinating field of histories of education generates myriads of historical narratives and uses a panoply of methods and theories. In our nightmarish times, one can wonder how much educational history will have to be rewritten in light of the current polycrises.

Finally, we would like to express our sincere thanks to our authors, peer reviewers, associate editors, Editorial Board members, our sponsor and publisher Kaplan Singapore, and friends for their wonderful support of the JALT project.

### References

Ali, W. (2020). Online and remote learning in higher education institutes: A necessity in light of COVID-19 pandemic. *Higher Education Studies*, 10(3), 16-25.

Alterri, D., Hindi, M., AlMarar, R., & Shubair, R. M. (2020). Transition to distance learning during the COVID-19 pandemic: Efforts within the Higher Education sector in the United Arab Emirates. *Journal of Applied Learning and Teaching*, *3*(2), 31-39. https://doi.org/10.37074/jalt.2020.3.2.17

Beauchamp, Z. (2021, September 9). 'Neoliberalism has really ruptured': Adam Tooze on the legacy of 2020. *Vox*, https://www.vox.com/22648254/neoliberalism-adam-tooze-2020-economy-covid-pandemic

Biggs, J., Harris, C., & Rudolph, J. (2019). Teaching for quality learning at changing universities. A tour de force of modern education history – an interview with Professor John Biggs. *Journal of Applied Learning & Teaching*, *2*(1), 54-62.

Brookfield, S. D. (2015). The skillful teacher: On technique, trust, and responsiveness in the classroom. John Wiley & Sons.

Brookfield, S. D. (2017). *Becoming a critically reflective teacher* (2nd ed.). John Wiley & Sons.

Brookfield, S. D., Rudolph, J., & Yeo, E. (2019). The power of critical thinking in learning and teaching. An interview with Professor Stephen D. Brookfield. *Journal of Applied Learning and Teaching*, *2*(2), 76-90.

Bullough, O. (2021, September 10). Shutdown by Adam Tooze review – how Covid shook the world economy. *The Guardian*, https://www.theguardian.com/books/2021/sep/10/shutdown-by-adam-tooze-review-how-covid-shook-the-world-economy

Butler-Henderson, K., Crawford, J., Rudolph, J., Lalani, K., & Sabu, K. M. (2020). COVID-19 in Higher Education Literature Database (CHELD V1): An open access systematic literature review database with coding rules. *Journal of Applied Learning & Teaching*, 3(2), 11-16. https://doi.org/10.37074/jalt.2020.3.2.11

Butler-Henderson, K., Tan, S., Lalani, K., Mandapam, S. K., Kemp, T., Rudolph, J., & Crawford, J. (2021). Update of the COVID-19 Higher Education Literature Database (CHELD v2). *Journal of Applied Learning & Teaching, 4*(1), 134-137. https://doi.org/10.37074/jalt.2021.4.1.22

Chan, S. P. (2020, May 7). Bank of England warns of the sharpest recession on record. *BBC News*, https://www.bbc.com/news/business-52566030

Crawford, J., Butler-Henderson, K., Rudolph, J., Malkawi, B., Glowatz, M., Burton, R., Magni, A. P., & Lam, S. (2020). COVID-19: 20 countries' higher education intra-period digital pedagogy responses. *Journal of Applied Learning & Teaching*, *3*(1), 9-27. https://doi.org/10.37074/jalt.2020.3.1.7

Fleming, P. (2021). *Dark academia. How universities die.* Pluto Press.

Grafton, E. T., Elder, E., & Burton, R. (2021). Innovative strategies to maintain nursing students' academic continuity during the COVID 19 pandemic. *Journal of Applied Learning & Teaching*, *4*(1), 21-28. https://doi.org/10.37074/jalt.2021.4.1.7

Guest, R. (2021, November 8). The aftermath of the pandemic will make politics more turbulent. *The Economist*, https://www.economist.com/the-world-ahead/2021/11/08/the-aftermath-of-the-pandemic-will-make-politics-more-turbulent

Gupta, H. (2020, May 9). Why some women call this recession a 'Shecession'. *New York Times*, https://www.nytimes.com/2020/05/09/us/unemployment-coronavirus-women.html

Harrington, K., Flint, A., & Healey, M. (2014, July). *Engagement through partnership: Students as partners in learning and teaching in higher education*. Higher Education Academy.

Hawley, S. R., Thrivikraman, J. K., Noveck, N., Romain, T. S., Ludy, M. J., Barnhart, L., Chee, S. S. W., Cho, M. J., Chong, H. Z. M., Du, C., Fenton, I. J., Hsiao, Y. P., Hsiao, R., Kevaer, L., Lee, H. S., Shen, W., Lai, C. C., Tseng, W. K., Tseng, W. C., & Tucker, R. M. (2021). Concerns of college students during the COVID-19 pandemic: Thematic perspectives from the United States, Asia, and Europe. *Journal of Applied Learning and Teaching*, *4*(1), 11-20. https://doi.org/10.37074/jalt.2021.4.1.10

IMF (2020, June). *World economic outlook update.* https://www.imf.org/en/Publications/WEO/Issues/2020/06/24/WEOUpdateJune2020

Kefalaki, M., & Karanicolas, S. (2020). Communication's rough navigations: 'fake' news in a time of a global crisis. *Journal of Applied Learning and Teaching, 3*(1), 29-41. https://doi.org/10.37074/jalt.2020.3.1.19

Lindhout, P., & Reniers, G. (2020). Reflecting on the safety zoo: Developing an integrated pandemics barrier model using early lessons from the Covid-19 pandemic. *Safety Science*, 130, 104907. https://doi.org/10.1016/j.ssci.2020.104907

Loder, N. (2021, November 8). What to expect in year three of the pandemic. *The Economist*,

https://www.economist.com/the-world-ahead/2021/11/08/what-to-expect-in-year-three-of-the-pandemic

Maddumapatabandi, T. D., & Gamage, K. A. (2020). Novel coronavirus (COVID-2019) pandemic: common challenges and response from higher education providers. *Journal of Applied Learning and Teaching*, *3*(2), 1-11. https://doi.org/10.37074/jalt.2020.3.2.20

Martins, H. R., Tinga, I. C., Manjate, J. L., Sitoe, L. C., & Matusse, A. P. X. (2021). Online learning during COVID-19 emergency—a descriptive study of university students' experience in Mozambique. *Journal of Applied Learning* 

*and Teaching, 4*(1), 29-37. https://doi.org/10.37074/jalt.2021.4.1.16

Mshigeni, S., Sarwar, E., & Kimunai, E. (2021). College students' educational experiences amid COVID-19 pandemic. *Journal of Applied Learning and Teaching*, 4(1), 38-48. https://doi.org/10.37074/jalt.2021.4.1.20

Mulrooney, H. M., & Kelly, A. F. (2020). Covid 19 and the move to online teaching: Impact on perceptions of belonging in staff and students in a UK widening participation university. *Journal of Applied Learning and Teaching*, *3*(2), 17-30. https://doi.org/10.37074/jalt.2020.3.2.15

Micklethwait, J., & Wooldridge, A. (2020). The wake up call. Why the pandemic has exposed the weakness of the West – and how to fix it. Short Books.

Rai, B. (2020). A team of instructors' response to remote learning due to Covid-19. A 10.012 Introduction to Biology case study. *Journal of Applied Learning & Teaching, 3*(2), 154-156. https://doi.org/10.37074/jalt.2020.3.2.15

Rudolph, J. (2020). Introduction to the fifth regular issue of JALT. *Journal of Applied Learning and Teaching*, *3*(1), 5-8. https://doi.org/10.37074/jalt.2020.3.1.1

Rudolph, J., & Tan, S. (2020). Introduction to the sixth regular issue of JALT. *Journal of Applied Learning and Teaching*, *3*(2), 6-10. https://doi.org/10.37074/jalt.2020.3.2.1

Rudolph, J., & Tan, S. (2021). Introduction to the seventh regular issue of JALT. *Journal of Applied Learning and Teaching*, *4*(1), 6-10. https://doi.org/10.37074/jalt.2020.4.1.1

Rudolph, J., Ching, S. R., & Tan, S. (2021). Anti-facemaskism—Politicisation of face masks during COVID-19 in the context of Trump's plutocratic populism. *Journal of Education, Innovation and Communication*, *3*(1), 37-58. https://doi.org/10.34097/jeicom-3-1-june21-3

Rudolph, J., Itangata, L., Tan, S., Kane, M., Thairo, I., & Tan, T. (2021). 'Bittersweet' and 'alienating'. An extreme comparison of collaborative autoethnographic perspectives from higher education students, non-teaching staff and faculty during the pandemic in the UK and Singapore. Unpublished manuscript.

Rudolph, J., Tan, S., Crawford, J. A., & Butler-Henderson, K. (2021). Perceived quality of online learning during COVID-19 in Higher Education in Singapore. Perspectives from students, lecturers, and academic leaders. Unpublished Manuscript.

Sutton, M. J., & Jorge, C. F. B. (2020). Potential for radical change in Higher Education learning spaces after the pandemic. *Journal of Applied Learning and Teaching*, *3*(1), 124-128. https://doi.org/10.37074/jalt.2020.3.1.20

Taleb, N. (2005). The black swan: Why don't we learn that we don't learn. Random House.

The Economist. (2020, June 22). Covid-19 has led to a pandemic of plastic pollution. https://www.economist.com/international/2020/06/22/covid-19-has-led-to-a-pandemic-of-plastic-pollution

The Economist. (2021a, November 19). What will the covid-19 pandemic look like in 2022. https://www.economist.com/the-economist-explains/2021/11/19/what-will-the-covid-19-pandemic-look-like-in-2022

The Economist. (2021b, July 31). The pandemic has exacerbated existing political discontent. https://www.economist.com/international/2021/07/31/the-pandemic-has-exacerbated-existing-political-discontent

The Economist. (2021c, October 16). Millions of lives depend on how the pandemic ends. https://www.economist.com/leaders/2021/10/16/millions-of-lives-depend-on-how-the-pandemic-ends

Tooze, A. (2021). Shutdown. How Covid shook the world's economy. Viking.

Wucker, M. (2016). *The gray rhino: How to recognize and act on the obvious dangers we ignore.* Macmillan.

Copyright: © 2021 Jürgen Rudolph, Shannon Tan and Tania Aspland. This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY). The use, distribution or reproduction in other forums is permitted, provided the original author(s) and the copyright owner(s) are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms.