A CRITIQUE OF "UNDERSTANDING THE UNINTENDED CONSEQUENCES OF ONLINE TEACHING"

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ABSTRACT

In an ever-changing environment, (of which the "ever-changing" was recently made more prominent due to a world-wide pandemic), humankind either needs to adapt or die. The question however remains: to what extent should we adapt to the "new"? Accepting the fact that each reader would glean and react to different aspects presented in the article "Understanding the unintended consequences of online teaching", I herewith present my opinion and use this opportunity to raise my concerns regarding the article. The critique of a largely unchallenged characterization of online teaching is a sign of growing intellectual vibrancy in the field which can foster innovative ideas for teaching methods. The objective of this critical note is not to reiterate the case for understanding the unintended consequences of online teaching, rather it is written in the pursuit to expand on what has been published thus far to advance online higher education pedagogy and to highlight the importance and value of academic research in an ever-changing environment. **Keywords:** online learning, online teaching, academic writing, role of theory

"Every new beginning comes from some other beginning's end" - Seneca.

It is true that in order to stay ahead, we should not stay behind, but to what extent is it a good idea to throw caution to the wind and adapt in the name of adapting? I hold the opinion that each of us will react to different aspects of what we read in the article "Understanding the unintended consequences of online teaching" (Rudman 2021). This article nevertheless appreciates the chance to engage constructively with differing ideas flowing from the article and infers by offering recommendations for further paths of enquiry for those interested in discourse analysis to deconstruct, and potentially reconstruct the unintended consequences of online teaching.

Analyzing articles such as "Understanding the unintended consequences of online teaching" (Rudman 2021) is a captivating facet of academic life. The critique of a largely unchallenged characterization of online teaching – and the discussions this can engender – indicates a burgeoning intellectual vitality in the field which can foster innovative ideas for

teaching methods. The comments that follow are written with comprehensive understanding that authors cannot control how others interpret their ideas. With this objective in mind, the intention of this commentary is not to reiterate the case for understanding the unintended consequences of online teaching. Rather, the article is written twofold: firstly, to advance online higher education pedagogy by expanding some intrinsic concerns regarding lecturer/student engagement and the use of technology and secondly, to substantiate the value and importance of academic writing in an ever-changing environment.

In an ever-changing environment, (of which the "ever-changing" was recently made more prominent due to the world-wide presence of Covid-19), humankind either needs to adapt or die. But does this mean that we should adapt to the "new" to such an extent as to cast sound academic principles aside? At the start of the Covid-19 pandemic, a pedagogical transformation occurred where students and lecturers were taken out of the class, requiring swift mobilization across all resources and university staff (CoSN 2020). The purpose of this critique is to analyse a few important and interesting points to provide an improved understanding of the article. By improved understanding and learning from the unintended consequences of online teaching, online higher education pedagogy can be advanced.

I agree with Rudman's conclusion that universities will have to become more attuned to the effect of new technologies on its human capital as well as the potential ramifications that goes hand in hand with a digital economy environment. I also agree that online teaching poses current and future risks. Further, I believe if we want to acquire a thorough comprehension of the unintended consequences of online teaching, we should transcend narrow perspectives. Finally, I believe doing this type of critique is crucial for advancing theory in our field. Firstly, this article provides a discussion on some of the arguments put forward in the article. This is succeeded by a discourse on some of the academic aspects of the article.

In agreement with the author

Firstly, I do agree that online interactive communication among lecturers and students could fall prey to improper styles of communication, for example: cyberbullying, harassment, trolling and doxing. However, these exploits would be breaching the university's code of conduct or communication policies and dealt with accordingly (Waghid 2021). Interestingly, Dumford and Miller (2018) explored advantages and disadvantages for online learning participation and found that those students who enrolled in a higher number of online courses showed a higher likelihood of participation in quantitative reasoning and appeared less likely to participate in discussions with diverse others. The students attending a higher number of online courses also reported a lower quality of interactions. It is therefore my opinion that the possible threats

associated with inappropriate online communicative styles can be pre-empted (or mitigated) by having the appropriate policies in place.

Secondly, the employment of technologies in the teaching and learning environment could be affected by multiple factors. The mass changeover to online learning is a highly complex and demanding endeavor for education systems, even in the most ideal situations (World Bank 2020). Machaba and Bedada (2022) infer that the commanding impeding factors for the employment of technology can be classified at personal and institutional levels. At an institutional level, five crucial hampering factors were experienced during the changeover to online learning during the Covid-19 pandemic. At an institutional level, institutions battled with the integration of technology, often experienced poor internet connectivity, technological training was lacking, technical support was insufficient or inadequate and the reward structure had no formal guidelines to reward the employment of technology in the workplace. At a personal level, it was found that lecturers complained being unable to allocate sufficient time for utilising technology, classroom management was arduous and lecturers experienced angst for being unable to get through the curriculum when employing technology (Machaba and Bedada 2022). Moreover, the employment of technologies in teaching and learning from the perspective of the student needs to be considered as well. In South Africa, 80.5 per cent of the nation either experiences severe poverty or struggles with food poverty. As a result of these elevated levels of poverty, access to technology and connectivity for teaching/learning is difficult. Interestingly, despite the fact that the majority of South Africans are affected by poverty, around 36 million people (approximately 60% of the nation) make use of mobile phones. (GSMA 2020). Hardman (2020) found that in South Africa, online teaching frequently implicates the use of mobile phones as a means of teaching, instead of using personal computers or tablets, moreover, devices frequently have to be shared among members of the same family. Ali (2020) recommends that higher online educational content should be made available on a broad range of devices and opines that access to mobiles is crucial. Additionally, access to technology other than mobile phones and dependable internet connectivity/bandwidth is not guaranteed due to a failing power grid and daily electricity outages for as long as six hours per day (Winkler 2021). Ali (2020) concurs that low bandwidth usage, as well as offline solutions, should be considered to ensure productive learning. In developing countries such as Pakistan, where internet access was hindered for a great mass of students due to technical and monetary issues, it was discovered that online learning is less efficient as conventional learning (Adnan and Anwar, 2020). It is put forward for consideration that the success of online learning can be improved when educational organizations design appropriate online lecture content and improve their curriculum (Adnan and Anwar, 2020). It is furthermore suggested that an online learning environment necessitates that lectures are offered asynchronously, which implies a shortage of resources as asynchronous instruction requires more effort to prepare for than synchronous delivery (Hardman et al. 2022). It is furthermore suggested that universities must negotiate with internet suppliers so that students can be granted access to online learning at no additional costs or at least enjoy a discounted rate (Ali 2020).

Thirdly: it is a reality that unauthorized persons (i.e., hackers) will embark on ventures where money could be made, by means of stealing and selling course materials of lecturers. Yet, this threat should not undermine human actions including plausible teaching and learning (Waghid 2021). Characteristics relating to institutional risks such as access controls, loss of academic freedom and ownership rights is being reviewed in this time of online teaching and learning. Copyright law is a very important part of law that affects higher educational institutions (Levy 2003). It is posited that institutions should safeguard their interests whilst preserving academic freedom for their lecturers, by creating a copyright/intellectual rights policy before a conundrum occurs (Gasaway 2002). The Coronavirus pandemic and concurrent lockdown have compelled higher education institutions to reconsider their teaching and learning approach in a hurry; that online learning has started but with differing levels of success and that implementation presents obstacles (Naidoo and Israel 2021).

Lastly, one might argue that online platforms might encourage student collusion. In their study, Mbhiza and Muthelo (2022) concedes that whilst students' interaction in online learning environments plays an important role in their academic success, as well as their comprehension of and tenacity in their courses, their study also revealed students' collaboration to cheat during assessments. Not only was a tendency noticed where students used social instant messaging applications such as WhatsApp to trade the answers in test questions; it was also found that students got together in a single location to write the online assessments, where they then freely assisted one another by answering specific questions between each other. Numerous streams of dishonesty in the online assessment were thus used. It is implored that strategies be configured to ensure that academic integrity is upheld (Mbhiza and Muthelo 2022). Similarly, Waghid and Davids (2017) warns that unless the assessment of teaching and learning material is approached as a collaborative educational endeavour, the pursuit of engaged higher education would, in any case, fall short.

While the aforementioned matters are tangible and require attention, I am slightly skeptical regarding a number of remarks relating to higher education teaching and learning using an online platform. I will now shift my focus to such a discussion.

Specific disagreements

Firstly, the pronouncements made about the inhibiting effect of streaming and recordings on lecturers' teaching performance within an online teaching-learning environment are a bit concerning. While some students and lecturers might be prone to be reserved when facing a camera (or recording), it should be emphasized that the objective is teaching and learning. Waghid (2019) opines that the act of teaching and learning itself, necessitates teachers to challenge students to interpret course materials in order to develop their potential. This implies that lecturers are not required to perform as such, but to focus on encouraging students to think for themselves and evoke their potential.

Secondly, teaching and learning is a pedagogical experience which requires that engaging deliberations among teachers and students arise from time to time (Waghid et al. 2021). To suppose that this encounter is more suited to a face-to-face situation, is preceded on a forged supposition that the role of lecturers should always be that of speakers, while students should assume the role of inactive listeners. (Waghid 2021). An online discourse forum or platform can also create learning opportunities when teachers and learners engage in a deliberative manner. It cannot be claimed that an online teaching-learning environment will lead to a decline in students' engagement with the work. For example: a study reported on by Brown et al. (2022), discovered that course-specific nudge interventions offered a reasonably easy and proactive technique which enables students and academics to share and improve attempts so that students' engagement can be enhanced. Their study furthermore uncovered the effectiveness of sending targeted nudges to low/ non-engaged students, thereby prioritizing timely expectation management and engagement principles. The qualitative data compiled by Brown et al. (2022), supported the claim that the nudging intervention fostered student empowerment, improved student confidence and increased their involvement. Moreover, Brown et al. (2022) reported that student expectations about online learning environments are influenced by their inference and not only impact their satisfaction levels regarding the online course environment, but also their satisfaction with the academic, their degree, and the university at large (Lawrence et al. 2019). Included herein are the various ways in which academics and students allocate their time online in comparison to face-to-face classroom environments; an absence of clearly defined class schedules; as well as the inference that efficient methods in face-to-face instruction will transfer to an online environment. Clark and Mayer (2016) report that expectation management and efficient communication are vital in encouraging students' engagement. Moreover, Wanner (2014) finds that a focused emphasis on expectations (for example establishing the purpose and guidelines of the course), teaches students to modify their expectations so that both positive and negative learning experiences, as well as any unforeseen situations, can be managed. Interestingly, Ali (2020) found that strongly encouraged learners, particularly those with prior experience in online learning, are highly probable to use the benefits that online learning opportunities offer, but that parents and education systems should expect their marks to plunge in the short-term. Pedagogical approaches for augmenting participation (Redmond et al. 2018) therefore have to be communicated to unaccustomed students. These requirements turn out to be crucial in online learning environments where the method of student engagement, as well as expectation management, possess the capacity to be insubstantial in comparison to courses delivered on campus (Stone 2019).

Lastly, the preparedness of lecturers to use technology in an online teaching-learning environment cannot be assumed to detract from the benefits online learning can offer. Using a sample of Ethiopian participants with ages ranging between 32 to 55 years old, Machaba and Bedada (2022) found that lecturers are prepared to use technology in an online teachinglearning environment. Their study comprised participants who acquired their master's and doctoral degrees after 1995, being the year when the Internet emerged. This implies that these students had technological access for knowledge and research purposes during their academic journeys. Machaba and Bedada (2022) report that their participants were familiar, utilised, experimented with and experienced a number of technological applications and software packages and felt confident to employ technology as a means to offer online education. They furthermore also found that participants who had not yet made comprehensive use of technology-based instruction, recognized the advantages for their professional practice. It was also found that technology-based instruction could be conveyed more accurately and consistently than face-to-face classroom instruction, implying a raised standard of teaching. Machaba and Bedada (2022) therefore infer that, generally, regarding knowledge, experience, willingness and motivation, respondents were prepared for technology-based teaching. Moreover, their respondents agreed that a limited amount of time would not impede on their ability to prepare and deliver technologically supported teaching; nor would classroom management or covering the curriculum when utilizing technology, be problematic. This implies that additionally to their experience, knowledge, exposure, willingness and motivation to teach using technology, they believed that their professional goals could be achieved even if they had to deliver technology-based training in the future. It is undoubted that immense technological progress world-wide requires a paradigm shift regarding the approach of our educational aspirations and goals. The World Bank (2020) however draws attention to a few challenges that should be considered in the development of online higher education pedagogy. Firstly, digital educational content should be organized to align with current curricula. This can

be very important to both students and lecturers to assure them that the opportunities for learning offered agree to wider educational targets within the education system. Secondly, the provision of supplemental guidance and technical support (such as the access and usage of remote and online learning content) can be crucial. Thirdly, it should be accepted that certain academic subjects lend themselves more readily to online platforms compared to others. Embracing a remote learning environment entails more than a technical issue; it also brings instructional and pedagogical challenges (Ali 2020). Consequently, sufficient preparation relating to assessment and curriculum knowledge and teaching materials is essential in online education (Coman et al. 2020). Technology serves as the delivery mechanism and demands a close cross-collaboration amongst technology, content and instructional units (Ali 2020; Coman et al. 2020).

Whereas the above concerns are valid and improve our understanding of the pedagogical implications pertaining to online learning, the internet can also be used as a resource providing a limitless supply of information. Should the available internet information always be trusted? I will now shift my focus to such a discussion.

ACADEMIC ASPECTS / MAJOR COMMENTS

The article makes interesting claims and is thought-provoking. It also succeeds in illustrating the results where a limitless supply of internet information is construed into and presented as an academic paper. In its successful attempt to illustrate how information and material (which is readily available on the internet), can be widely used, mis-used and pirated, it also raises the important question: to what extent does this contribute to academia? A possible reason for this lack of certainty is the ambiguity in the research base. No research model or methodology upon which this article is based, nor research methods utilized to choose data for analysis, or the protocols observed to assure the validity of the interpretations and conclusions are provided. Nevertheless, such matters regarding method and methodology are very significant in evaluating the quality of research. As an illustration: openness about the methodology allows the reader to consider researchers' position while thorough descriptions of the methods that are used assist in the decision making regarding the trustworthiness of our conclusions. Rudman's disregard of these facets of research design has two consequences. Firstly, only a partial account of the possible threats that online teaching can pose is presented. Secondly, readers are provided with restricted foundations for comprehending the reasoning and validity beneath the array of concepts.

The function of theory and its place in the hierarchy of a research process

Bacharach (1989) elucidates that theories are interpretations of a social or natural phenomenon, behavior or event. Furthermore, a scientific theory is a framework of ideas and associations amongst those ideas, that jointly offers a systematic, logical, and clear interpretation of a phenomenon of interest within the realm of suppositions and confines. In accordance with Saldaña and Omasta (2016), a theory distills research into a statement about "social life that contains transferable applications to other populations, settings, context and potentially time periods". Instead of just describing or predicting, theories should explain why things happen (Woodside and Wilson 2003).

Applying theories in research offers many benefits. Firstly, theories present the fundamental rationale behind the occurrence of a social or natural phenomenon by elucidating the primary catalysts and results of the target phenomenon, as well as the reasons for it, also by explaining what fundamental processes are responsible for that phenomenon. Secondly, theories help us understand by integrating previous empirical discoveries within a conceptual framework and reconciling opposing conclusions by uncovering possible facets that influence the connection between two concepts in diverse studies. Thirdly, theories offer direction for subsequent research by assisting to recognize relationships and concepts that merit further investigation. Lastly, theories can bridge gaps between other theories, thereby bestowing cumulative knowledge building with the effect that existing theories can be reviewed in a new light (Woodside and Wilson 2003).

Collins and Stockton (2018) agree with Guba and Lincoln (1994), who poses that, while there might be cases where the exploratory aspect of a study takes precedence over the advantages of a conceptual framework, theory-free research is non-existent. Collins and Stockton (2018) proceeds to elucidate that a researcher who is unable to enunciate a conceptual framework, may have omitted to do the essential and difficult work to uncover the fundamental underlying principles and preconceived ideas about their study. Collins and Stockton (2018) infer that the belief that preconceived notions are non-existent nor could influence a study is, in essence, a theoretical inclination. Considering qualitative research and social science, Collins and Stockton (2018) appreciate and engage in advanced discourse about the generation of theory. As an instance: Timmermans and Tavory (2012) build on Peirce (1935) and Hanson (1958) to move beyond the duality of inductive and deductive approaches and explore the concept of abduction in grounded theory to intensify the capacity of studies to foster groundbreaking theories. Timmermans and Tavory (2012) explains that abduction is a creative process to generate new theories, which are based on "unexpected research findings", which eventually has the potential to guide a researcher towards new insights encoded into theoretical frameworks, departing form old concepts. As Deacon et al. (2007) explains:

"(...) research methods are not just tools of the trade. They are ways of gathering the evidence required by competing definitions of what counts as a legitimate and worthwhile approach to the investigation of social and cultural life. In our view, many of the most interesting questions facing communications research are best tackled by combining different research methods." (Deacon et al. 2007)

In that case, why is theory necessary in research? Silverman states:

"Any scientific finding is usually to be assessed in relation to the theoretical perspective from which it derives and to which it may contribute." (Silverman 2013)

Furthermore, it is essential to remember that data gathered in the field possess no inherent correctness or incorrectness, instead the usefulness of data will vary based on the research queries:

"Research questions are inevitably theoretically informed. So, we do need social theories to help us address even quite basic issues in social research." (Silverman 2013)

The essential role of acknowledging resources

A further aspect of this article is the lack of acknowledgment of any resources. This article successfully illustrates how "internet information" can be construed to form "new ideas" and "new information", but the lack of acknowledgment of any resources discredits the paper simultaneously. For example: it is claimed:

"Research shows that ..." (p 4) without providing any reference. Similarly, providing a statement such as: "There are various documented international cases of..." (p 11), again without reference, lacks credibility in my opinion.

The reader is left to consider the value of the paper, having no references to base the validity upon. This leaves the reader with the question: what precisely does this paper contribute to academia, other than a few non-grounded ideas flung together? If resources had been acknowledged, the reader could validate the information, in reaching a conclusion. This paper makes interesting claims and is thought-provoking yet would have a stronger impact had the statements been validated. In my opinion, the lack of acknowledgement of any resources discredits a paper that otherwise could have contributed to academic research.

The importance of peer review

A crucial component of the scientific methodology within the scientific disciplines involves the meticulous scrutiny of manuscripts by fellow researchers. During the peer review process, an article is read critically and then either rejected, accepted for publication, or requested to be altered and enhanced before it is published. This procedure is always conducted anonymously. Without this independent seal of approval, the results could be considered possibly erroneous and branded the same self-serving status as a press release.

With the dawn and growth of electronic media, which argues that anyone should have the freedom to publish as they desire and that the "readers" should determine independently whether the article holds scientific merit, doubts have arisen regarding the requirement for peer review. Even though peer review is not without any imperfections, the benefits are real. If "freedom of expression" is allowed as an alternative to peer review, many problems would be created simultaneously. In the words of Gannon (2001):

"Peer reviewing is the manner in which we self-monitor our work. We should make sure that it remains an important factor in the whole process that transfers experiment into shared information by highlighting its benefits in a way that can be understood by the scientific community. To bypass or to diminish peer review may start a process that would eventually undermine the output of our research, allow the cynics to question its validity and give free rein to those that prefer their biases to results from well-controlled experimental investigations."

Minor comments

The value of language editing should never be underestimated.

CONCLUSION

This article makes interesting claims and is truly thought-provoking. It also succeeds in illustrating the results where a limitless supply of internet information is construed into and presented as an academic paper. In its successful attempt to illustrate just how information and material readily available on the internet can be widely used and mis-used, it also raises the question: to what extent does this contribute to academia? This response advances online higher education pedagogy by expanding ideas regarding lecturer/student engagement as well as the usage of technology in online higher education environments. By understanding the implications and complexities embedded in online higher education, the process to develop pedagogical strategies will be enhanced, thereby improving student success. Suggestions for further avenues of enquiry into the discourse of online higher education are curriculum content design and solving implementation challenges in online learning. We live in a world where electronic media is growing and readily available, and readers are often required to decide for

themselves if the content presented is of any value. It is my opinion therefore that the academic world needs to safeguard its principles of academic research. As Rudman says: "... because in a digital world everything becomes permanent in an instant".

REFERENCES

- Adnan, M. and K. Anwar. 2020. "Online Learning amid the COVID-19 Pandemic: Students' Perspectives." Online Submission 2(1): 45–51.
- 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.
- Bacharach, S. B. 1989. "Organizational theories: Some criteria for evaluation." Academy of Management Review 14(4): 496–515.
- Brown, A., J. Lawrence, M. Basson, and P. Redmond. 2022. "A conceptual framework to enhance student online learning and engagement in higher education." *Higher Education Research & Development* 41(2): 284–299.
- Clark, R. C. and R. E. Mayer. 2016. *E-learning and the science of instruction: Proven guidelines for consumers and designers of multimedia learning*. John Wiley & sons.
- Collins, C. S. and C. M. Stockton. 2018. "The central role of theory in qualitative research." *International Journal of Qualitative Methods* 17(1): 1609406918797475.
- Coman, C., L. G. Ţîru, L. Meseşan-Schmitz, C. Stanciu, and M. C. Bularca. 2020. "Online teaching and learning in higher education during the coronavirus pandemic: Students' perspective." Sustainability 12(24): 10367.
- CoSN. 2020. "COVID-19 Response: Preparing to Take School Online." https://www.cosn.org/ sites/defaults/files/COVID-19%20Member%20Exclusive_0.pdf.
- Deacon, D., M. Pickering, P. Golding, and G. Murdock. 2007. *A practical guide to methods in media and cultural analysis*. 2nd Edition. London: Hodder Arnold.
- Dumford, A. D. and A. L. Miller. 2018. "Online learning in higher education: Exploring advantages and disadvantages for engagement." *Journal of Computing in Higher Education* 30(3): 452–465.
- Gannon, F. 2001. "The essential role of peer review." EMBO reports 2(9): 743-743.
- Gasaway, L. N. 2002. Drafting a faculty copyright ownership policy. University of North Carolina.
- GSMA. 2020. The mobile economy: Sub-Saharan Africa 2020. Report.
- Guba, E. G. and Y. S. Lincoln. 1994. "Competing paradigms in qualitative research." *Handbook of qualitative research* 2(163–194): 105.
- Hanson, N. R. 1958. *Patterns of discovery: An inquiry into the conceptual foundations of science*. New York, NY: Cambridge University Press.
- Hardman, J. 2020. "Into the abyss: Online teaching/learning in a pandemic." *Mail and Guardian* 4 May: 31. Cape Town.
- Hardman, J., K. Shankar, T. Crick, F. McGaughey, R. Watermeyer, V. Ratnadeep Suri, and R. Chung. 2022. "Does anyone even notice us?' Covid-19's impact on academics' well-being in a developing country." *South African Journal of Higher Education* 36(1): 1–19.
- Lawrence, J., A. Brown, P. Redmond, and M. Basson. 2019. "Engaging the disengaged: Exploring the use of course-specific learning analytics and nudging to enhance online student engagement." *Student Success* 10(2): 47–59.
- Levy, S. 2003. "Six Factors to consider when planning online distance learning programs in higher education." *Online Journal of Distance Learning Administration* 6: 1–16.
- Machaba, F. and T. Bedada. 2022. "University lecturers' preparedness to use technology in teacher training of mathematics during Covid-19: The case of Ethiopia." *South African Journal of Higher*

Education 36(1): 171–192.

- Mbhiza, H. and D. Muthelo. 2022. "COVID-19 and the quality of mathematics education teaching and learning in a first-year course." *South African Journal of Higher Education* 36(2): 189–203.
- Naidoo, G. M. and C. Israel. 2021. "A Critique of Online Learning in Higher Education during the Coronavirus Lockdown Level 5 in South Africa." African Journal of Development Studies (formerly AFFRIKA Journal of Politics, Economics and Society) 11(1): 127–146.
- Peirce, C. S. 1935. *Collected papers. Scientific metaphysics*, ed. C. Hartshorne and P. Weiss, Vol. VI. Harvard Univ. Press.
- Redmond, P., A. Heffernan, L. Abawi, A. Brown, and R. Henderson. 2018. "An online engagement framework for higher education." *Online learning* 22(1): 183–204.
- Rudman, R. J. 2021. "Understanding the unintended consequences of online teaching." *South African Journal of Higher Education* 35(4): 1–12.
- Saldaña, J. and M. Omasta. 2016. *Qualitative research: Analyzing life*. Sage Publications.
- Silverman, D. 2013. Doing qualitative research: A practical handbook. Sage.
- Stone, C. 2019. "Online learning in Australian higher education: Opportunities, challenges and transformations." *Student Success* 10(2): 1.
- Timmermans, S. and I. Tavory. 2012. "Theory construction in qualitative research: From grounded theory to abductive analysis." *Sociological Theory* 30(3): 167–186.
- Waghid, Y. 2019. *Toward a philosophy of caring in higher education: Pedagogy and nuances of care.* New York: Palgrave-MacMillan.
- Waghid, Y. 2021. "On the unintended consequences of online teaching: A response." South African Journal of Higher Education 35(4): 13–15.
- Waghid, Y. and N. Davids. 2017. *Education assessment, and the desire for dissonance*. New York: Peter Lang.
- Waghid, Y., F. Waghid, J. Terblanche, and Z. Waghid. 2021. *Higher teaching and learning for alternative futures: A renewed focus on critical praxis.* New York: Palgrave-MacMillan.
- Wanner, T. 2014. "Parallel Universes: Student and Teacher Expectations and Interactions." ergo 3(3).
- Winkler, H. 2021. Why "South Africa's electricity blackouts are set to continue for the next five years." *The conversation* 30 March.
- World Bank. 2020. "Remote Learning and COVID-19. The use of educational technologies at scale across an education system as result of massive school closings in response to the COVID-19 pandemic to enable distance education and online learning." file://E:/PC/Rapid-Response-Briefing-Note-Remote-Learning-and-COVID-19-Outbreak.pdf.
- Woodside, A. G. and E. J. Wilson. 2003. "Case study research methods for theory building." Journal of Business & Industrial Marketing 18(6/7): 493–508. https://doi.org/10.1108/08858620310492374.