

# COVID-19: Raising the Bar on Education Technology to 'Flatten the Curve'

# Vasanthrie Naidoo

**ORCID iD:** <https://orcid.org/0000-0003-2740-5983>

# Maureen Nokuthula Sibiya

**ORCID iD:** <https://orcid.org/0000-0003-1220-1478>

# Abstract

The World Health Organization has announced that the current outbreak of the Coronavirus disease (COVID-19) health crises has constituted a public health emergency of international concern. This has necessitated international lockdowns of countries as part of strict infection control protocol. The COVID-19 pandemic has also become a major challenge for most learning institutions around the world, making this disease a pervasive force shaping and challenging higher education as it faces the new realities of distance education. The pandemic crises have affected the continuity of learning and the delivery of course material at higher education institutions. To remain relevant, tertiary education institutions have had to re-invent their learning environments in order to embrace distance education whilst still trying to maintain effective student-lecturer relationships. Various dimensions of quality assurance challenges often surround the facilitation and delivery of distance education or multimedia platforms of teaching and learning, prompting the need for rigid quality control principles to guide programme or course delivery. Notably, there is still a need to identify functional deficits and challenges of distance education programmes from a learning and teaching perspective. Sharing insight, based on our experience and research with distance education, this paper introduces essential knowledge and discusses key issues related to quality assurance practices with distance learning. Stimulating discussion and establishing a connectivity between quality assurance practices and online teaching and learning programmes, this article also offers valuable insight into

forthcoming as well as existing curriculum developers who plan to engage in distance education curriculum development and delivery.

**Keywords:** COVID19, Higher education, Distance education, Quality Assurance

## **1 Introduction and Background**

The COVID-19 pandemic has overwhelmed the entire world, and not only has it demonstrated the fragility of the human race at the hand of Mother Nature; this horrific chapter of the world has reshaped the landscapes of the health systems and educational systems across nations. In this crises mode, there is no Plan B. There is only a Plan A, which stipulates that the only mode of survival is to remain confined in the safety of one's home and adhere to the national call for social distancing to 'flatten the curve'. Thus the increased use of educational technology and learning management systems to incorporate curricula changes for the better. Certainly, the corona virus has tested lecturer/student interaction and nowadays, lecturers and students simply interact via Skype, Zoom, TEAMS and WhatsApp online systems to facilitate and participate actively in distance education (DE) or flexible and distributed learning. According to Keok (2005), the phrase 'flexible and distributed learning' is used to include both distance learning and e-learning. In both cases, the awarding institution delivers courses through independent- learning materials or via distance technology such as online material, directly to the student without the need for a partnering institution. However, while DE may be seen as the only possibility to salvage the academic year, there are many questions that need answers. Existing literature on curriculum development in DE focuses on the value of this type of educational offering but show a paucity of evidence, particularly regarding the quality assurance practices surrounding DE in higher education sectors. Notably, there is potential for developing a more robust quality assurance discourse on distance educational initiatives, especially in view of the current turbulence surrounding the global academic sector as a result of the corona virus outbreak.

This article aims to identify inherent challenges associated with distance education, and illustrates pertinent questions that are raised in pedagogical practice, when experiences of academic leaders and students are

explored. From a quality assurance perspective, we argue that DE nursing education programmes are still challenged owing to deficient governance structures. A literature search has revealed many publications relevant to international higher education collaboration, but distance nursing education in higher education remains an under-researched area.

The following questions are therefore suggested to stimulate discussion and establish connectivity between quality assurance practices and the successful implementation of any distance learning and teaching programme.

- What is the need for quality assurance mechanisms in distance education?
- How can a culture of quality within partnering institutions be promoted and what would be the elements of such a culture?
- What resources and training are needed?
- What role can the adoption of best practices play?

Whilst the authors of this paper do not represent any quality assurance bodies of any on-line teaching initiative, the service delivery and quality assurance deficiencies inherent in this type of education cannot be ignored. Reflections in this paper on the various dimensions of quality assurance challenges surrounding the distance education programmes should consequently be viewed as levers to improving service quality of its present and future teaching and learning programmes.

## **2 Higher Education and Distance Education**

The current challenges in higher education delivery has given DE a new appeal, tapping into unexplored instructional areas. While learning institutions deal with limitations as they are encountered in this context of technological change, it is not surprising that higher education institutions have had no choice but to seize the educational technology market with the expectation of expanding their reach to students to salvage the academic year. The changing context of curricula delivery requires that learning institutions carefully consider revising original curriculum plans without comprising the outcomes of programmes, as the transition from face-to-face to online mode of learning and teaching is made (Chaubey & Bhattacharya 2015). Educational

technology and learning management systems are an important consideration in the design for the online higher education environment (Adzharuddin & Ling 2013). Institutions are expected to make decisions about the planned curriculum and how they deliver this within the confines of international and national regulations. This involves making decisions about what knowledge is selected and how it will be sequenced and paced for the online modes. It also involves choices about pedagogies and assessments and their alignment to the intended learning outcomes.

Higher education constitutes a vital component of a country’s culture and knowledge, serving as a conduit for the sustainability of national values and educational goals. It also plays an important role in a country’s economy the generating new knowledge through research and innovation (Manyonga & Ngubane-Mokiwa 2019). It is important to understand what is meant by distance learning or distance education, as technology is evolving and the definition of what distance learning is continues to change. According to King *et al.* (2014), the terms ‘distance education’ and ‘distance learning’ are often used interchangeably and are understood to occur when the teacher and learner are physically separated. With this type of education, there is acquisition of knowledge and skills through mediated information and instruction, which encompasses all technologies and other forms of teaching and learning, but at a distance. This distance between lecturer can be across provinces, states and even countries. Whilst distance education has some clear benefits, it can be grouped into two major categories, each having its own constraints (Mdakane, Els & Blignaut 2016). The two categories are synchronous and asynchronous distance education. Synchronous situations provide benefits that allow some ‘real-time’ interaction with student and lecturer or instructor such as intermittent face to face interaction between both parties. Synchronous situations are more time sensitive but are known to be geographically insensitive. Examples of such situations would be teleconferencing, video conferencing and online-webinars (King *et al.* 2014).

### **3 Quality Assurance in Distance Education Programmes**

Quality assurance is undoubtedly a significant ‘player’ in any form of higher education and countries around the world have different quality assurance systems for their education delivery, as necessitated by their unique national contexts. A recent study that focused on quality assurance practices of higher

education teaching and learning found that some types of higher education programmes are no longer provided solely within national borders (Naidoo & Sibiya 2018). The authors of the same study also agree that implementing and delivering a curriculum outside its country of origin is a globalisation strategy that is gaining increasing popularity among higher education institutions. Whilst being very rewarding for many global education institutions, this type of educational offering can increase the institution's profile, and provide openings for intercontinental business opportunities, consultative activities, and collaborative research. However, it can also be a costly exercise, with little reward for the lecturer and student, if not governed by proper quality assurance mechanisms. Notably, the calibre of staff participating in the programme, as well as teaching methods and assessment strategies, are all vital components to the successful implementation of ant distance learning programme.

The key findings from a study by Fearnside and Chang (2017) agree that globalised endeavours of distance education often involved the mobility of students, academics, institutions, programmes and quality assurance services. As a result, it is vital for educational institutions to have a clear rationale for their engagement in distance education ventures, ensuring that they are 'fit-for-purpose' in terms of the curriculum context and the expectations of the student, giving a clear understanding of the relevant legal frameworks that govern the roles of the respective stakeholders (Kemp *et al.* 2018). A study that explored the use of on-line teaching and learning at learning institutions have found that when learning management systems are introduced into more advanced communities, users should not experience issues such as low technical literacy, high workload, multiple languages and organisational constraints like poor technical support, infrastructure and internet access. The study further states that for on-line teaching and learning, in the case of distance education, to be truly inclusive and be a success in developing economies, contextual issues like resources need to be considered (Chaubey & Bhattacharya 2015). Manyonga and Ngubane-Mokiwa (2019) agree that radical changes in any higher education teaching and learning, will need universities to provide the right kind of people to manage technical operations such as learning management systems (Manyonga & Ngubane-Mokiwa 2019). This is strongly evidenced in the current plight of the global higher education sector in view of the COVID-19 implications on teaching and learning, which has led to anxiety and uncertainty about the interaction between these technological developments, distance education and the impact

of digital transformation in the academic arena. According to Vlachopoulos (2020), the reliance on online and distance education as a solution to ensure continuity of learning in the face of the COVID-19 pandemic crisis, may well prove to be overly optimistic. The same study noted that ineffective quality control such as fragmented regulatory frameworks or accreditation guidelines and policies can make the delivery of distance education challenging.

Pedagogy has been influenced by the empowering aspects of an increased understanding of the social world, often allowing students to challenge and change them (Collins 2013). Thus, students involved in distance learning programmes often categorize quality indicators from the following two viewpoints. Whilst the quality of academic staff, quality of programmes, and university reputation are considered academic factors; financial assistance, counselling, support services, job placement service are considered non-academic quality indicators (Gamage *et al.* 2008).

While much research attention is currently paid to quality assurance policies in developed countries such as in Europe, USA, Canada and Australia, there still exists a gap in knowledge related to other countries that may have more experience with the implementation of quality assurance, but an under-developed policy implementation system (Hashjin *et al.* 2015). Mendes and De Jesus Jose Gil Fradique (2014) agree that service quality is viewed as a critical aspect in organizational management and developing, and implementing assessment and monitoring strategies for quality control are key priorities in most organizations. Dhunpath, Amin and Khumalo (2017) state that autonomy-supported learning environments that bring together the emotional and cognitive aspects of learning can engender change and move the learning institution's system of education beyond the traditional disciplines, while Mendes and De Jesus Jose Gil Fradique (2014) argue that such distance education demands to staff to function in an environment that allows for planning and implementation of measures aimed at improving quality. Nguyen (2012) and Bednarz *et al.* (2010) have found that successful delivery of this type of education entails a collective effort of all its stakeholders. It has been argued that parallel to the opportunities distance or online education teaching and learning provide, there are challenges and potential pitfalls that can threaten its delivery, such as students in under resourced countries not enjoying the same benefits as their counterparts in developed countries (McBurnie & Ziguras 2007). Kemp *et al.* (2018) agree and state that good practice in higher education relies on strong leadership and commitment from all parties, to

ensure access to organizations, individuals and project sites A study focusing on best operating practices in higher education has revealed that although attempts are made to align DE to international standards, such as taking into consideration the country's cultural diversity, the absence of a quality control body still existed (Chiwandire 2019). The importance of this quality control body in distance education was summarised aptly, when Knight (2008) states that distance learning and teaching act as a catalyst to prepare students to live in a more interdependent and connected world and the necessity for governance and standardisation was crucial for students living in a globalised world. Parker and McMillan (2007) state that successful quality assurance processes can be achieved by controlling inputs such as students and educational resources as well as providing a quality educational programme. Lum (2006) agrees and further states that cultural differences and diverse learning styles of students should be considered as opportunities to design curricula that are locally relevant and culturally inclusive.

## **4 Research Findings from Distance Education Nursing Programme Facilitation and Delivery**

### ***Research Methodology***

An interpretive research paradigm was used together with a qualitative multiple case-study approach to identify functional deficits and challenges of DE nursing programmes nationally and internationally, to determine national and international best operating practices in the implementation and facilitation thereof. The use of a case study approach in this study allowed the researcher to gain an in-depth understanding of the situation and meaning for those involved in the programme, whilst addressing the uniqueness of individual cases and contexts. Given the international focus of this study, the researchers felt it was important to sample national and international participants, such as programme coordinators, facilitators and students. The population comprised national and international nursing education institutions, nursing graduates and academic leaders such as the directors of international nursing education projects, nursing faculty and departmental heads and lecturers. This assisted in drawing a comparison between national and international DE practices. During the interviews, participants articulated their responses by giving an in-depth and experiential understanding of the multiple realities surrounding their

participation in the programme. Tables 1 and 2 below illustrate the type of questions that were posed to the different participants to facilitate discussions during the data collection processes. Table 3 outlines documents had been found to be useful to collection of information in this study.

**Table 1**

The following questions and topics guided the interviews with Academic Leaders:

• What are your current roles and responsibilities in your institution?
• Tell me about your institution’s mission, purpose and goals?
• What was your role in distance delivery of nursing education?
• What were the main aims of this project related to your institution?
• How do you believe your institution links its mission and purpose to facilitate these programmes?
• Do you think your institution maintained compliance with standard criteria and achievement of learning, teaching outcomes?
• What internal measures were in place to assist and support staff and students
• What would you recommend as additional factors that can be put in place to assist and support staff and students engaging in distance nursing education?
• How does your institution evaluate these distance education programmes with regard to faculty growth?
• How does it support professional development ( <i>nursing education and research</i> )?
• How does your institution recognize cultural, economic and social awareness of the partnering institution and the learner?
• How does your institution assess and support distance student learning?
• What processes, instruments, standards or feedback material was used?



<ul style="list-style-type: none"> <li>• What constraints did you encounter in this type of teaching/learning/administration?</li> </ul>
<ul style="list-style-type: none"> <li>• Describe any logistical, geographical, historical, political, economic, cultural, social, personal challenges that your institution may have encountered?</li> </ul>
<ul style="list-style-type: none"> <li>• Can you suggest further best operating practices with regard to distance education?</li> </ul>

**Table 2**

The following questions and topics guided the interview with graduates of a distance nursing education program:

<ul style="list-style-type: none"> <li>• What are your current roles and responsibilities in your profession?</li> </ul>
<ul style="list-style-type: none"> <li>• When were you involved with distance nursing education?</li> </ul>
<ul style="list-style-type: none"> <li>• Were you made aware of the main aims of this project?</li> </ul>
<ul style="list-style-type: none"> <li>• What were your thoughts on the recruitment and selection processes?</li> </ul>
<ul style="list-style-type: none"> <li>• Do you consider these distance education programmes to be adequately evaluated and how does it support your professional development?</li> </ul>
<ul style="list-style-type: none"> <li>• What challenges did you encounter during this type of teaching/learning or administration? (<i>Logistical, geographical, historical, political, economic, cultural, social, personal</i>)</li> </ul>
<ul style="list-style-type: none"> <li>• What would you recommend as additional factors or best operating practices that can be put in place to assist and support staff and students engaging in distance nursing education?</li> </ul>

**Table 3: Record Review Guide**

Due to the case-study approach of the research, documents were an important part of this study. They assisted the researcher to understand policies and processes which are not observed and also supplement and verify information obtained from interviews. Only non-confidential documents were reviewed.

The following documents were found to be useful to collection of information in this study:

<ul style="list-style-type: none"><li>• Documents that describe the mission, purpose, or goals of the institution involved in distance education.</li></ul>
<ul style="list-style-type: none"><li>• Documents that describe how the institution manages quality assurance as a whole with regards to distance nurse education.</li></ul>
<ul style="list-style-type: none"><li>• Documents that describe how the institution develops and reviews courses and programmes.</li></ul>
<ul style="list-style-type: none"><li>• Documents that describe how the institution evaluates and supports professional development of staff involved in distance education.</li></ul>
<ul style="list-style-type: none"><li>• Other electronic or hard copies of the above documents for collection by the researcher at the time of the institution visit.</li></ul>

As part of a case study approach to the research study, other sites of information and relevant documentation such as provider manuals, guidelines, policies or procedure manuals were used to for data collection and analysis purposes. Documentation in this study was analysed for descriptions and patterns related to three primary areas:

- Conceptual issues such as definitions of quality, purposes of having policies or guidelines regarding implementation of DE
- Descriptions of structures and processes used to monitor, assess, or improve delivery of DE in reference to curriculum and programmes, student learning, teaching practices and decision-making processes.
- Contextual issues such as internal and external factors that impact or influence delivery of DE.

## **5 Results**

All reviewed institutional records such as orientation records and brochures paint an optimistic and colourful picture, but no internal or external factor that pose a possible challenge to the student or programme delivery was mentioned. There also appeared to be variations in the information gathered from records, allowing for gaps and inconsistencies like unclear guidelines and rules

governing the programmes. As views of academics and graduates were explored and best operating practices were compared and analysed, other functional processes and system deficits became apparent as follows.

### **5.1 Recruitment and Selection**

Information received from participants on DE reflects that learning institutions often collaborate for mutual gains. There appeared to be no centralized selection, recruitment or registration processes and institutional policies dictating selection criteria ensured that most of these policies were tailor-made or suited to the needs of the learning institution offering the programme. This study concluded that effective and appropriate quality assurance policies and adoption of international best operating practices are vital during any recruitment and selection process and participants in this study strongly felt that the responsibility for the quality assurance of DE should rest with national authorities such as the accreditation bodies that govern higher education and training in the respective countries. Academic personnel such as coordinators and facilitators verbalized that it was imperative for them to have a sound understanding of institutional policies and procedures. Findings further revealed that the selection and recruitment of programme facilitators were not methodologically sound, as reference checks on teaching skills, experience, expertise and qualifications were surpassed. According to the findings of this study, organizational policies and standards are necessary to govern the recruitment and selection processes in DE, as they have an influence in shaping governments' regulatory frameworks related to the delivery of higher education. Some of the participants emphasized the importance of having quality assurance programmes and procedures such as proper orientation for students, coordinators and facilitators, workshops, seminars for students and teachers and e-learning mentorship programmes and webinars. They felt it would help clarify expectations, policies and prevent further challenges. It was also verbalized that coordinators and facilitators of the DE programmes need to understand the dynamics of on-line learning and teaching. This needed to be shrouded in cooperative teamwork and the utilization of a technologically sound integrated delivery system. Responses suggested that having competent, well-motivated and enabling workforce encouraged student cooperation, provided support and enhanced delivery of online teaching and learning especially in the absence of face-face interaction.

## **5.2 Monitoring and Regulatory Activities**

It was evident from documentation reviews that although programmes were developed within the educational framework of the country, they appeared to utilize methodologies based on international models. This appeared to be a direct conflict in the programme facilitation as it did not reflect the needs of the institution, the students and the regulatory and commercial environment or country from which the programme operated. The study also revealed that although educational institutions attempted to maintain high academic standards there was still a need to revise and adapt content, teaching practices and assessment strategies, as distance learning students did not always enjoy the privileges of first-world countries that have modern equipment and facilities like simulation laboratories and fully fledged library resources. Graduates felt that different educational systems created problems with accreditation and recognition causing increased frustration and delays in awarding of a qualification. These findings led the researcher to believe that there are significant implications in terms of consumer protection regarding DE, as these programmes are poorly monitored and governed.

## **5.3 Best Operating Practices**

It was also noted that within the DE environment, there were strengths, limitations and conflicting practices across educational institutions. The implementation and utilization of current and emerging technologies and learning management systems was a best operating practice, which was particularly beneficial to students engaged in research outputs. While the e-learning platforms encouraged and facilitated distance learning and online communication between student and lecturer, it also allowed for the viewing or listening to recorded teaching sessions. This assisted with clarity and emphasized student selection into the type of educational programme students want to gain more insight into. It was also reported that DE policies are influenced by cultural awareness; therefore, DE programmes need to be structured in such a manner that they take into consideration cultural differences, ensuring congruency with the cultural orientation of the students and lecturers alike. However, the implementation and utilization of current and emerging educational technologies are another best operating practice that was noted which are particularly beneficial to students engaged in research outputs.

These e-learning platforms encouraged and facilitated distance learning and online communication between student and lecturer.

## **6 Discussion**

Quality assurance monitoring and control measures cannot be fragmented, disorganized, uncoordinated and ineffective in higher education spaces. According to Mdakane, Els and Blignaut (2016), a core function of HEIs is to promote quality in higher education, which is also reflected in the institution's teaching and learning policy, which aims to ensure the delivery of continuous high quality education for its students through cost effective academic programmes. The same study concludes that effective and appropriate quality assurance policies and adoption of international best operating practices are vital during recruitment and selection processes and that the responsibility for the quality assurance of distance learning should rest with national authorities and accreditation bodies that govern education and training. Academic personnel such as coordinators and facilitators should have a sound understanding of institutional policies and procedures, relevant teaching skills, experience, expertise and qualifications that encourage capacity building.

Although tertiary education programmes are developed within the educational framework of the country, they appear to utilize methodologies or base their programmes on international models. At times, Educational programmes are offered simultaneously in two different provinces, but educational systems are bound by bureaucracy and politically influenced programmes are known to be poorly monitored and governed (Adzharuddin & Ling 2013). Additionally, there should be increased emphasis on the importance of having quality assurance programmes and procedures such as proper orientation for students, coordinators and facilitators, workshops, seminars for students and teachers and e-learning mentorship programmes prior to the commencement of such programmes (Dhunpath & Narismulu 2011). These initiatives need to be properly negotiated and communicated to all relevant parties as they help to clarify expectations, policies and procedures of partnering institutions and prevent further challenges. The implementation and utilization of current and emerging technologies are another best operating practice that is particularly beneficial to students engaged in research outputs. Thus, e-learning platforms utilised in distance learning should also be user friendly, making pedagogy more relevant, research driven and responsive to

the needs of postgraduate students in their own learning spaces. It is vital that an educational institution ensures rigid quality control measures and all programmes offered should be in line with the institution's vision, mission, while philosophies and should be governed by the same principles as all the other satellite learning centres. Such principles can mean having suitably qualified lecturers or teachers to coordinate and facilitate particular programmes, modes of delivery and contact time with its students. This appears to be a direct conflict in the programme facilitation, as it does not reflect the needs of the institution, the students and the regulatory, and commercial environment or country from which the programme operated. This was a cause for concern, especially if coordinators and facilitators of distance learning and teaching failed to maintain high academic standards, revise and adapt content, teaching practices and assessment strategies, as not all students enjoyed the privileges of first-world country resources and had modern equipment and facilities like simulation laboratories and fully-fledged library resources.

## **7 This Study's Contribution to the Body of Knowledge**

Distance learning and teaching appears to be the way forward in this century. The findings and lessons learnt in this study signify the increased personal growth, cultural diversity awareness, adaptation to an unfamiliar environment, and increased self-efficacy of DE students. These findings are also relevant to all graduates engaged in other national and international partnerships related to non-nursing DE programmes and expands stakeholder knowledge, ensuring quality in DE. Further areas for research based on the findings are to explore other educational disciplines' experiences with DE facilitation. This could be done to ascertain further challenges from a different perspective. The findings of this study also suggest more research be done to determine whether learning institutions implement the best operating practices such as quality assurance programmes to govern DE programmes that serve the best interests of the student and institution.

## **8 Conclusion and Recommendations**

This paper concludes that effective quality assurance governance structures can increase the credibility of the course offering whilst enhancing an institution's prestige and growing a country's educational economy. The global

education market is changing rapidly and has its own concerns and challenges. New alliances both international and national are formed; and private and corporate sectors are increasingly active as DE providers. Whether distance education programmes are a way to develop a niche market for the country's economy, a more stringent control and approach towards quality assurance practices needs to fall within the ambit of good governance. There is a need for governmental and non-governmental bodies to develop quality assurance principles that will allow for the provision of ongoing quality improvement plans in the educational sector. Where national or institutional quality assurance bodies exist, they are an effective means of such control, and where they do not exist, they should be created. Quality assurance practices of distance education provision need urgent attention, especially in time of crises where traditional face-to-face learning and teaching have been replaced by on-line or distance education facilitation. So, when all is said and done, it is no consolation that currently the entire world's educational economy is a bleak picture and educationalists and academic experts are faced with one big burning question, 'How do we take a very digitalised student population into the future with distance learning and teaching?'

As governments around the world respond to the ravaging effects of the corona virus outbreak on the educational system, the world needs to come to terms with the reality of having on-line education as a support mechanism to decrease the viral load that this pandemic has placed on a country's educational sector. As much as we embrace the technological advancements of distance education, one constantly needs to question the quality assurance principles that guide the pursuit of excellence in distance teaching and learning.

### **Acknowledgements**

Part of this paper is drawn from Vasanthrie Naidoo's PhD thesis, which was supported by the Faculty of Health Sciences, Durban University of Technology. The authors also acknowledge the editor and the anonymous reviewers for their constructive input in the crafting of this paper.

### **References**

- Adzharruddin, N.A. & L.H. Ling 2013. Learning Management Systems (LMS) among University Students: Does it Work? *International Journal of e-Education, e-Business, e-Management and e-Learning* 3: 248-252.

<https://doi.org/10.7763/IJEEEEE.2013.V3.233>

- Bednarz, H., S. Schim & A. Doorenbos 2010. Cultural Diversity in Nursing Education: Perils, Pitfalls, and Pearls, *Journal of Nursing Education* 49, 5: 253 - 260. <https://doi.org/10.3928/01484834-20100115-02>  
PMid:20143759 PMCID:PMC2921036
- Chaubey, A. & B. Bhattacharya 2015. Learning Management System in Higher Education. *International Journal of Science Technology & Engineering* 2: 158 - 162.
- Chiwandire, D. 2019. Universal Design for Learning and Disability Inclusion in South African Higher Education Curriculum. *Alternation Special Edition* 27: 6-6.  
<https://doi.org/10.29086/2519-5476/2019/sp27a1>
- Collins, A. 2013. Teaching Sensitive Topics: Transformative Pedagogy in a Violent Society. *Alternation Special Edition* 9: 128 - 149.
- Dhunpath, R. & P. Narismulu 2011. Diversity, Transformation and Student Experience in Higher Education Teaching and Learning. *Alternation* 18, 2:1 - 14.
- Dhunpath, R., N. Amin & L. Khumalo 2017. Advancing Teaching Innovation and Research Excellence in Higher Education. *Alternation* 24, 2: 1 - 11.
- Fearnside, R. & K. Chung 2017. Cross-border Quality Assurance: Aase Study of Hong Kong and Macao. *Higher Education Evaluation and Development* 11, 2: 81 - 94. Available at:  
<https://doi.org/10.1108/HEED-07-2017-0002>  
(Accessed on 24 April 2020.)
- Gamage, D.T., J. Suwanabroma, T.T. Ueyama, S. Hada & E. Sekikawa 2008. The Impact of Quality Assurance Measures on Student Services at the Japanese and Thai Private Universities. *Quality Assurance in Education* 16, 2: 181 - 98. Available:  
<https://doi.org/10.1108/09684880810868457>  
(Accessed on 24 April 2020.)
- Hashjin, A.A., B. Delgoshaei, D.S. Kringos, S.J. Tabibi, J. Manouchehri & N.S. Klazinga 2015. Implementing Hospital Quality Assurance Policies in Iran: Balancing Licensing, Annual Evaluation, Inspections and Quality Management Systems. *International Journal of Health Care Quality Assurance* 28, 4: 343 - 355. Available:  
<https://doi.org/10.1108/IJHCQA-03-2014-0034>  
PMid:25982635 (Accessed on 25 April 2020.)



- Kemp, J., E.M. Bannon, M.M. Mwanja & D. Tebuseeke 2018. Developing a National Standard for Midwifery Mentorship in Uganda. *International Journal of Health Governance* 23, 1: 81 - 94. Available at: <https://doi.org/10.1108/IJHG-09-2017-0051> (Accessed on 20 April 2020.)
- Keok, C.B 2005. *An Outcomes-based Framework for Assessing the Quality of Transnational Engineering Education at a Private College*. Doctor of Education, University of Southern Queensland.
- Knight, J 2008. *Higher Education in Turmoil: The Changing World of Internationalization*. Ontario, Canada: Ontario Institute for Studies in Education, University of Toronto. <https://doi.org/10.1163/9789087905224>
- Lum, L 2006. Internationally-educated Health Professionals: A Distance Education Multiple Cultures Model. *Education + Training* 48, 2/3: 112 - 126. <https://doi.org/10.1108/00400910610651755>
- Manyonga, B. & S. Ngubane-Mokiwa 2019. Curriculum Development: An Enriched Approach for Twenty-First Century Open Distance Learning. *Alternation* 27: 37-64. <https://doi.org/10.29086/2519-5476/2019/sp27a2>
- McBurnie, G. & C. Ziguras 2007. *Transnational Education: Issues and Trends in Offshore Higher Education*. London: Routledge, Taylor and Francis Group. <https://doi.org/10.4324/9780203968352>
- Mendes, L. & M.J.G. de Jesus Jose Gil Fradique 2014. Influence of Leadership on Quality Nursing Care. *International Journal of Health Care Quality Assurance* 27, 5: 439 – 450. Available at: <https://doi.org/10.1108/IJHCQA-06-2013-0069> (Accessed on 20 February 2018.)
- Naidoo, V. & M.N. Sibiya 2018. Promoting the Well-being of Higher Education: Re-engineering of Transnational Nursing Education. *South African Journal of Higher Education* 32, 6: 351 - 369. <https://doi.org/10.20853/32-6-2961>
- Nguyen, T. 2012. *Internal Quality Assurance in Vietnam's Higher Education: The Influence by International Projects, Evaluation and Assessment*. Master of Science in Education Science and Technology. University of Twente, Amsterdam.
- Parker, V. & M. McMillan 2007. Challenges Facing Internationalization of Nursing Practice, Nurse Education and Nursing Workforce in Australia. *Contemporary Nurse, Nurse Recruitment and Retention* 2, 24: 128 - 136.

<https://doi.org/10.5172/conu.2007.24.2.128>

PMid:17563321

Vlachopoulos, D. 2020. COVID-19: Threat or Opportunity for Online Education? *Higher Learning Research Communication* 10, 1:16 – 19.

Available at :<https://doi.org/10.18870/hlrc.v10i1.1179> (Accessed on 22 December 2020.)

Vasanthrie Naidoo

Senior Lecturer

Department of Nursing

Durban University of Technology

Durban, KwaZulu-Natal

[vasanthrien@dut.ac.za](mailto:vasanthrien@dut.ac.za)

Maureen Nokuthula Sibiyi

Deputy Vice Chancellor

Executive Management

Durban University of Technology

Durban, KwaZulu-Natal

[nokuthulas@dut.ac.za](mailto:nokuthulas@dut.ac.za)