

# The Changing Landscape of Teaching and Learning: How Adult Students View Online Approaches at a University in South Africa

### Zamalotshwa Florence Thembisile Thusi<sup>1</sup>, Sampson Tawiah<sup>2</sup>

<sup>1</sup>Durban University of Technology, Pietermaritzburg, South Africa, ZamalotshwaT@dut.ac.za <sup>2</sup>Durban University of Technology, Pietermaritzburg, South Africa, SampsonT@dut.ac.za

ABSTRACT: As university lecturers of an education program, we aim to enhance community college lecturers' social and economic well-being, empowering them with skills for employment and community development. We respond to the need to train lecturers and prospective Adult and Community Education lecturers in South Africa. Due to the COVID-19 pandemic, our traditional content delivery method has shifted to online teaching and learning. This shift can negatively and positively impact adult students' learning processes. Therefore, it is crucial to investigate the perceptions of students involved in online teaching and learning approaches. To achieve this, we adopted a qualitative approach and an experimental design, collecting data from 22 students deemed information-rich. Thematic content analysis was used to analyze the data collected, and the results positively reflected the relevance of the education program and online teaching and learning. Based on the emergent results, we recommend proper funding and close monitoring of the entire education programme to ensure quality delivery using online approaches.

KEYWORDS: Adult Education, Online teaching and learning, Community Education, COVID-19, South Africa

#### **Introduction and Background**

The sudden outburst of COVID-19 has impacted the education system in the world. It has been scorching for universities in most countries, and South Africa is no exception. The government has experienced severe disruptions in its education systems. Worst of all, the government imposed a total shutdown on both the primary and higher education sectors, apparently because of a lack of knowledge on the extent of the Pandemic on human lives (Spaull & van der Berg 2020). This has brought distractions to the entire education system, resulting in a complete shutdown imposed in South Africa to manage or combat the Pandemic. Citing Kaplan (2000), Le Grange (2020, 91) describes the closure of institutions in one word, 'lockdown', which depicts a mandatory or non-mandatory geographical quarantine to include educational institutions, among others.

However, bringing the whole education system to a halt can have severe implications for the labor market and raise poverty levels in South Africa and beyond. Primary data collected from select countries in Western Europe and North America have exposed principal labor market contractions (Jain, Budlender, Zizzamia & Bassier 2020). Therefore, if the higher education system is not strengthened amidst COVID-19, emerging economies in developing countries like South Africa can see a steep rise in unemployment and poverty. Jain et al. (2020) buttress their findings from a study that revealed active employment decreases, increasing poverty for job losers. Thus, strengthening the education system in this time of crunch is vital for promoting the well-being of individuals nationally. The perception of students investigating this critical issue will help support the focus of the educational programme we are involved in, use appropriate teaching and learning methods, and ensure an enabling academic environment for current and future students.

The higher education sector, especially, has seen an accelerated paradigm shift to online pedagogical methods of teaching. According to Assalahi (2020), Ogbonnaya, Awoniyi and Matabane (2020), there is a global demand for online teaching and learning emanating from

the emergence of the Pandemic and the bleak future of resuscitating the situation for the general educational good. Although the shift to online is pivotal to keeping the higher education systems foregrounded in the delivery of their programmes, the challenges of a complete revamp from a campus-based approach to Open Distant E-Learning (ODeL) must be addressed. According to Ogbonnaya et al. (2020), online teaching challenges are encountered because of the COVID-19 pandemic, including the inability to use computers, erratic power supply, and lack of internet access in rural Africa. We, thus, sought to solicit the views or perceptions of students in a South African university to contribute to the existing body of knowledge.

Indeed, the COVID-19 pandemic has caused great havoc to the South African education system, which needs to be addressed urgently. This calls for all education stakeholders to maximize their commitment to keeping the education system grounded and functioning in the new normal. From a curriculum studies point of view, Le Grange (2020b) suggests a multidimensional approach to tackling the effect of the Pandemic on education. These range from moral, race, surveillance technologies, information sharing, neoliberalism and ultimately, the application of *Ubuntu-currere* – oneness in humanity with a collaborative effort in combating the effect of COVID-19 on education. Wahab and Ali (2020) advocate solidifying ODeL in higher education as necessary in the fight against the menace. Besides, Mhlanga and Moloi (2020) intimate that the Fourth Industrial Revolution (4IR) must be unleashed in higher education to heighten the move to online learning. The principle of the 4IR emphazises the need to incorporate technologies of all kinds and apply them in our current state of affairs embattled with COVID-19 (Mhlanga & Moloi 2020). Indeed, never before have the 4IR tools become so necessary in the entire education system during the COVID-19 pandemic.

#### Adult and Community Education Training and Teaching (ACETT): Policy and Practice

Educational policies are developed to radically change the education people are involved in, conceptualize and develop a curriculum for students' academic development. Major role players comprising a group of scholars from 10 South African universities were assigned to create a curriculum framework for the programme: Advance Diploma in Adult and Community Education and Training Teaching (ACETT) (Ismail 2018). The development of this new qualification targets students in the post-school sector as a priority to capacitate and develop Adult Education and Community lecturers in Community Education and Training (CET) colleges. This policy on the lecturer expansion project aligns with the National Qualification Framework (NQF), aiming to grow the professionalism of community college lecturers.

Moreover, the Sector Education Training Authorities (SETAs) have taken great strides in funding students enrolled for the ACETT program in universities in South Africa designated for quality implementation. This funding has increased the prospects of adult educators to attain professionalism through training and teaching. Thus, recognizing ACETT in the NQF is a milestone achievement for the designers of the curriculum and the affected students (Ismail, 2018). Besides, the policy directly responds to the call for a new qualification framework to develop adult educators and lecturers in the Adult and Community Education and Training (ACET) sectors. Thus, the Department of Higher Education and Training (DHET) 2015 published a policy on the minimum requirements of programmes leading to qualifications for educators and lecturers in ACET. A major lamplight of the procedure for the general South African populace is to provide "quality learning opportunities for out-of-school youths and adults whose learning was affected negatively and who have been and are still being disadvantaged educationally" (DHET 2015, 5).

Therefore, Adult and Community Education and Training (ACET) is an educational tool that promotes optimal opportunities for adult learning and literacy, increases knowledge and skills development, and subsequently recognizes ACET as a lifelong and continuing education in the post-school sector. The DHET set up CET colleges to achieve this objective, which brought together all community learning centers under one umbrella. However, to

qualify to teach in these colleges requires appropriately trained and competent lecturers. Meanwhile, cohorts of students are being skilled across designated universities in South Africa to meet lecturer demand for CET colleges. These students are enrolled for the Advanced Diploma in Adult and Community Education and Training Teaching (ACETT). The ACETT curriculum is delivered through face-to-face contact teaching on various campuses. However, due to the sudden outbreak of COVID-19, the curriculum delivery method has shifted solely to online teaching and learning. Therefore, we sought to investigate students' perceptions in a South African university as the ACETT programme turned to online approaches.

# Educational Experiences of the Author's Involvement in Policy Implementation: Adult and Community Education Teaching Training

In this section, we reflect on our roles as university lecturers in implementing the policy on ACETT in a South African university. As university lecturers and concerned citizens, implementing the policy is significant to national development. We are taking cognizance of the detrimental effect of apartheid on black citizens of South Africa. Education and training are shelved, leaving most adult learning colleges needing qualified teachers or lecturers. We come into the picture by training Community College lecturers to be fortified with teaching methodologies for imparting knowledge and skills to individuals accessing Community Colleges.

We are part of a team of academics coordinating teaching and training college lecturers registered for the Advanced Diploma in Adult and Community Education and Training Teaching (ACETT) programme. Current students are the first cohort on the curriculum. The ACETT programme has a duration of two years part-time. Most of the students are already placed at community learning centres. However, the programme also admits out-of-school youths and adults who require self and community development (Tawiah 2020). Indeed, we aim to be part of educational and socio-economic programmes to transform lives.

# Incorporating Transformative Learning Theory into Adult and Community Education and Training Teaching

Jack Mezirow institutionalized the transformative learning theory. For decades, the approach has survived exploration and criticism through studies (Taylor 1998). The work of Mezirow helps to make meaning of one's life experiences encapsulated in community-based learning for social transformation, intercultural understanding, developing courage, critical reflection of past experiences, lifestyle and education for a career change. However, the theory has gained support recently with some form of criticism. According to Taylor (1998), transformative learning processes should, to a great extent, influence context, have varying natures of learning processes, minimise the critical reflection process and encourage other ways of knowing, relationships and the practice of a particular teaching approach geared towards an outcome termed "perspective transformation" (Taylor 1998, 10).

Transformative learning theory gives insight into discourses of reflective experiences, helping individuals gain autonomy to enhance life's changes. According to Mezirow (1997), independent thinking is a significant agent for democratic citizenship and making good moral choices to foster change in conditions. It can lead to productive self-reflective attitudes, enabling one to acquire and use information, identify and organize resources, engage in collaborative work, communicate ideas, plan and organize activities, and use mathematical knowledge and computers as essential competencies and skills (Mezirow 1997).

Mezirow's theory has significant implications for adult learning and higher education. It speaks to adult educators, lecturers and Adult and Community College Lecturers to understand the social structures and belief systems that influence adult learning processes. The aim is to transform community college lecturers into autonomous and responsible thinkers. College lecturers reflecting critically on their past experiences will be able to take advantage

and be serious about learning processes and programmes towards their professional development. It will also help them gain mastery and expertise in their specific subject matters and selected areas of learning. The relevance of the transformative learning theory ensues the overarching goal of adult education in general.

# The Objective of the Study

Because of the COVID-19 pandemic, higher educational institutions have shifted to virtual or online teaching methods to keep their programmes running. Students have no choice but to adapt to the new normal to achieve their learning goals. This drastic change in teaching and learning demands an investigation. The present study, therefore, aims to investigate the perception of students involved in virtual teaching and learning in a South African university.

# Methodology

We solicited qualitative methodology to gather data from semi-structured individual interviews. We used Google Forms and Zoom media platforms to collect data from the first cohort of students registered for the Advanced Diploma in Adult and Community Education and Training Teaching. Using a random sampling method, we conducted interviews with 47% of students from a total population of 48 final-year students. The researchers explained the research rationale to the participants before they were asked to participate in the study voluntarily. The researchers sought all necessary permission before the start of the study. Participants' names were withheld to maintain confidentiality. The data collected were analyzed using thematic content analysis. The themes were elaborated upon and discussed in detail. These were supported with direct quotes from participants' responses, illuminating the study's findings.

## **Data Presentation and Analysis**

The study aimed to understand students' views as they switch from traditional contact teaching and learning to online pedagogical approaches. After the data collection process, the researchers coded and categorized the data. The information gathered was analyszed using thematic content analysis. It is appropriate because it exhibits some rigor and inductiveness elements and contains a set of designed procedures to identify themes from textual data (Guest, MacQueen & Namey 2012). For these reasons, the researchers were able to identify themes and presented data accordingly. The paragraphs below elucidate the data submitted under specific themes. These are formulated from the main research question: What are students' perceptions of online teaching and learning in a South African university?

### **Relevance of the Adult and Community Education and Training Teaching Programme**

The state of community colleges is like a sheep without a shepherd. Most lecturers in these colleges must be professionally qualified to teach in the institutions. It can make students enrolled in community colleges fail to achieve their learning goals. Therefore, the provision of the Advanced Diploma in ACETT must be relevant to up-skill prospective and current lecturers. Participants were asked how they felt and whether the programme was relevant to their needs. Overwhelmingly, the majority of the participants were pleased with the ACETT programme. One participant joyfully said:

This program is beneficial because it addresses the need for Community education.

Yet another student also said thus:

I really appreciate what I am specializing in, and the class is good. Our Lecturer really knows what he is doing and knows the specialisation very well and this is helping me because I am the specialist in the KZN CET COLLEGE in this subject. I am in a position where I am the curriculum specialist in this subject nationally. I am the examiner for the Life Orientation. In the province, I am the Chief Marker and the ATP implementer.

From the above quote, the student has an educational duty to develop community members who enroll in KZN CET COLLEGE. The ACETT programme has fortified this individual to manage and teach Life Orientation as a subject in which he is a specialist. Indeed, the Advanced Diploma in ACETT has come to rescue unqualified community college lecturers in the nick of time. It has increased the confidence and the excitement of teaching their subject specialization as they learn. A participant could not hide her feelings when she said:

I feel great because I have learned different theories that I can use when I am teaching, and I feel like an expert on them. Life Orientation is a subject that people despise, thinking it is easy and end up not being able to pass it on to other people.

The above extract suggests that the Advanced Diploma in ACETT programme can be a turning point in the history of Adult Education in South Africa. To see it survive, it must be appropriately managed, financed and monitored to ensure quality.

#### Benefits of the Adult and Community Education and Training Teaching Programme

The Advanced Diploma in ACETT is delivered through media platforms such as Zoom Meeting, Microsoft Teams and Moodle. These online means of teaching and learning were used because of COVID-19. Therefore, during the investigation, the students were asked to express their views of the benefits they might derive from the programme. The responses from the students revealed that although there was a drastic shift to online teaching and learning approaches vis-a-vis direct contact teaching and learning, the programme's benefits were alarming. The following quote explains how the students intend to benefit from the ACETT programme they are enrolled for:

It will benefit me a lot because I will be gaining more knowledge about the subject and feel confident to deliver/conducting it on my workshops/roadshow we used to have in the province. This will also benefit me when I am setting question papers for the national.

From the quotes above, the participants anticipate academic knowledge and skills for self and community development. As they are skilled and professionally developed, they will be in a better position to assist community members in their everyday lives. Besides, the programme will help them to become experts in their field of study. Yet still, some were already benefiting from the programme. They have been able to use the skills and experience acquired in their teaching lessons. A participant said thus:

At the moment, I am teaching Life Orientation, which is one of my specializations, it has given me more experience and has helped me with different things in my field of work. At the moment, I am coming up with different teaching methods that I learned from the programme.

From the quotation above, the participant indicated that she has come to learn about different teaching methods. This implies that the effective use of other teaching methods can help achieve good and quality lesson delivery and work with colleagues. The extract below indicates this fact:

By using it to students and develop other teachers by showing them more methods that they can use to teach their students. Life Orientation will help me communicate well with my team and be able to solve some problems in my centre.

ACETT programme is indeed helping students to gain mastery of their subject areas leading to a better understanding of the subject matter, learners and their environment. One participant expressed this thought by saying that:

My specialization helps me understand more about the learners and environments they come from. By helping learners through the teaching & learning process also broadens my horizons on my social structure of communities Instead of just confusing what happens in the classroom, I will be able to understand the learners' backgrounds, thus understand the different learners' needs.

The extract above also revealed the state of confusion in which the students find themselves when it comes to subject matter delivery in class, for example, the social structure of communities. Teaching methodologies through the ACETT programme has helped alleviate such content knowledge gap. The participants' responses also illuminated the benefit they derived from virtual teaching and learning as they improve their computer skills. One participant has this to say:

My technical skills have improved since I joined online classes. I feel more comfortable answering questions by email than by my mouth. I prefer online courses as they are mostly scheduled for scheduled dates similar to face to face lessons.

Without efforts to learn how to use computer technologies, the students will not be able to achieve their academic and professional development desires. This informs why they have adapted to online teaching and learning methods. The extract above further revealed the preference for online courses, which gives them comfort in learning. However, only one participant sees little or no benefit from virtual knowledge besides being instigated to keep up with current technological devices. He laments thus:

As from my own perspective, there are no benefits from online learning besides helping learners to keep up with current technology.

### **Professional Development of Community College Lecturers**

A major problem identified in community colleges is that most lecturers are underqualified or not professionally qualified to teach. The provision of the Advanced Diploma in ACETT is in the right direction to professionally qualify college lecturers for the field. The onus rests with lecturers and prospective college lecturers to enroll and take advantage of the programme. The participants' responses indicated that ACETT is a milestone opportunity for professional educational development. This finding is revealed in the extract below.

Being in the mainstream education sector was a dream come true for me, as I am passionate about education and imparting knowledge is what fulfil me. When I got an opportunity to be involved in the Adult Education sector I realized that this was a different scenario altogether to what I was used to. So I began looking at opportunities to develop and expand my knowledge regarding Adult and Community education.

The above extracts show that the ACETT programme is an opportunity for current students to gain knowledge and skills and improve their academic qualifications. Further, it will make students qualified to teach in Adult and Community Education colleges. Therefore, students cannot let this educational opportunity slip by. A participant aptly said:

I wanted to upgrade myself and the programme came just in time of need. When the opportunity came I grabbed it and I don't regret myself. It was the best decision ever. I am learning a lot and gaining more experience.

# Motivation to Enroll in the Adult and Community Education and Training Teaching Programme

Motivation to learn is significant if students are to take advantage of ACETT programmes. The Department of Higher Education and Training (DHET) has been beneficial in this regard. The students are given financial assistance with their tuition through a government-provided bursary. Without mincing words, a student said:

### .... it was a Bursary that motivated me to enroll in the Advanced Diploma in Adult and Community Education and Teaching Training programme.

The extract above makes one believe that without financial assistance from the DHET, most students cannot enroll for the ACETT programme. So, to achieve the objective of the programme, it is good that students are funded. Moreover, the entire ACETT programme must be adequately funded and monitored to ensure quality. Meanwhile, some students have a different perception of the matter. The students believe that enrolling in the ACETT programme was for self-educational development and job security:

*I wanted to develop myself and secure my job by learning more about adult education and its policies and how to manage the programmes of community learning centres.* 

Most of the students who are enrolled in the programme are already teaching at the community colleges. Therefore, to keep their jobs, they have to upgrade their qualifications. Also, from a different perspective, some of the students believe that most people in communities are educationally disadvantaged and unemployed. Hence, ACETT will help make a difference in their lives by assisting them to attain the primary education they need to learn life skills for survival. One participant revealed this finding by saying that:

In most communities, most people are disadvantaged because they do not have access to basic education, which impacts their job opportunities. I want to make a difference in the community by helping people get the basic education they need to learn life skills.

From the above, the participant believes that a lack of basic education can negatively impact job prospects for community members. Therefore, there is a need for access to basic education and training.

#### **Discussion of the Findings**

The study has brought to light significant findings. First, the study revealed that ACETT is relevant to up-skilled community college lecturers and prospective lecturers to equip them for their duties. Most community colleges lack qualified instructors, so the Advanced Diploma in ACETT is needed to capacitate these individuals. However, COVID-19 threatened the training and development of community college lecturers (Spaull & van der Berg 2020) undergoing training in higher institutions. To avoid this problem, most institutions shifted to online teaching and learning approaches, thereby exacerbating the demand for online pedagogical teaching methods (Ogbonnaya et al. 2020). For this reason, the ACETT programme has been kept alive to train and develop community college lecturers to be fit for purpose.

Second, the provision of ACETT is beneficial from the participants' perspective. Regardless of COVID-19, the benefits of moving towards virtual methods lessons were alarming. Some participants expect to increase their academic knowledge and skills for self and community development. Others were equipped to teach and organize workshops for community members, thus, allowing them the opportunity for primary education. Most students enrolled in the ACETT programme are trained to use different teaching methodologies to benefit their learners. This corroborates the principle of Jack Mezirow's transformative learning theory (Mezirow 1997). Emphasizing this point, Taylor (1998) mentioned that transformative learning should influence context, use different methods of teaching processes and encourage different ways of knowing.

Moreover, the study's findings have revealed the need for the professional development of community college lecturers. Professional development is significant for job retention and to up-skill underqualified lecturers. The ACETT programme has taken this dimension of educational development by acquiring knowledge, skills and academic qualifications needed to teach in Adult and Community Education colleges. Therefore, according to the participants, the ACETT programme is a first-class opportunity for professional educational development. With this in view, there is a need to draw insight from transformative learning theory (Mezirow 1997). ACETT students should be conscious of reflective experiences, thus, helping them gain autonomy in their thinking to bring about changes in their circumstances. Independent thinking and productive self-reflective attitudes are the pillars for making sound judgement towards education and training (Mezirow 1997).

Furthermore, the study's findings exposed that motivation is an essential component that instigates a person to act. Therefore, students need to be motivated to take advantage of the ACETT programme. An important element to help achieve this agenda is to provide students with financial assistance. No doubt, the participant revealed during the investigation that they were motivated to enroll for the Advanced Diploma in ACETT because of the bursary provided by SETAs and the DHET. We argue that without this bursary or financial support, most students cannot enroll for the ACETT programme. And this might lead to continuous unqualified staffing at ACETT centres, poor training, and persistent unemployment, especially in deprived areas. Nonetheless, it is good that the DHET, in collaboration with SETAs, has broken the back of such perceived encounters. In addition to funding received, ACETT students were self-motivated, desiring to be qualified to secure their jobs and help community members have access to basic education and training to engage in productive activities.

Lastly, by comparing the two entities, the participants were asked to shed light on their perception of shifting from direct contact teaching to online lessons. The study revealed that the students welcomed the move to online education and learning methodology. Besides, they have no choice but to adapt to the new normal. Some students have used the opportunity to improve their computer skills. However, others struggle with technology and media platform usage (Ogbonnaya et al. 2020). Hence, individuals need to learn how to use technology in the fast-growing digital economy. This agrees with the Fourth Industrial Revolution (4IR) principles, where there is a need to incorporate technologies of all kinds in education amidst COVID-19 (Mhlanga & Moloi 2020). Given this, Pete and Soko (2020) argue for evaluating both the instructors' and students' preparedness for online teaching and learning regarding digital competence, internet access, and connectivity. Unfortunately, the sudden blast of COVID-19 did not allow such an evaluation. Meanwhile, the students were responsive and benefited from online teaching and learning without contact lessons, although preferred.

# Implications of the Study for Adult and Community Education and Training Teaching Programme

Most community college lecturers are underqualified. Therefore, ACETT aims to train and professionally qualify these individuals to effectively and efficiently carry out their duties. As an urgent matter of government policy, the study has significant implications for the professional development of community college lecturers. Well-trained instructors can have a positive impact on their learners. Hence, it is necessary to fortify Community Education and Training lecturers with knowledge and skills to impart to their students, leading to community and nation-building. Another significant implication is to see ACETT adequately supported financially and monitored for quality assurance. When these mechanisms are implemented and checked accordingly, ACETT can achieve its goals in South Africa and the entire African continent, where Adult Education is used as an instrument for educational, social, economic, and political emancipation.

### Conclusion

The study investigated students' perception of the shift of the ACETT programme to online teaching and learning because of the COVID-19 Pandemic. The study's findings indicated that the students embraced the provision of ACETT through virtual lessons. Furthermore, ACETT is relevant to community college lecturers desiring to be up-skilled and academically qualified to

teach at community colleges. Also, the study revealed that although COVID-19 forced the ACETT programme to online approaches, the students still benefitted from it. It helped them conduct workshops and use different teaching methodologies to benefit their learners.

Moreover, the study illuminated that ACETT is instrumental in lifelong learning and community development. It also aids the professional development of community college lecturers. Another revelation of the study is that motivation is significant if students are to take advantage of ACETT programmes. Indeed, the DHET and SETAs have financially supported students to enroll for the Advanced Diploma in ACETT. Finally, the study revealed that online teaching and learning helped students achieve their goals, while face-to-face lessons were impossible because of COVID-19. All these findings imply that ACETT is a significant Adult Education programme in South Africa today. Therefore, we recommend that to achieve and ensure the programme's continued success, it must be adequately funded and monitored closely to ensure quality in its input and output delivery.

#### References

- Assalahi, H. 2020. "Learning EFL online during a pandemic: Insights into the quality of emergency online education." *International Journal of Learning, Teaching and Educational Research* 19(11): 203–222. doi.org/10.26803/ijlter.19.11.12.
- Department of Higher Education and Training. 2015. Higher Education Act (101/1997) and National Qualifications Framework Act (67/2008): Policy on minimum requirements for programmes leading to qualifications for educators and lecturers in adult and community education and training. V. 597. Government Gazette.
- Le Grange, L. 2020. "The COVID-19 pandemic, online teaching/learning, the digital divide and epistemological access." *South African Journal of Higher Education* 34: 1–10. Available from: http://alternation.ukzn.ac.za/Files/books/series-01/01/06-Du- Preez.pdf.
- Guest, G, MacQueen, K & Namey, E. 2012. "Introduction to Applied Thematic Analysis." *Applied Thematic Analysis*. 3(20): 1–21. doi.org/10.4135/9781483384436.n1.
- Ismail, S. 2018. "Articulating a space for critical learning with a social justice orientation in an adult education programme." *South African Journal of Education* 38(4): 1–9. doi.org/10.15700/saje.v38n4a1702.
- Jain, R, Budlender, J, Zizzamia, R & Bassier, I. 2020. *The labor market and poverty impacts of Covid-19 in South Africa*. V. 44. Available from: https://scholar.harvard.edu/files/ronakjain/files/covid-19-southafrica.
- Mezirow, J. 1997. "Transformative Learning: Theory to Practice." New Directions for Adult and Continuing education (74): 5–12. Available from: https://www.ecolas.eu/eng/wp- content/uploads/2015/10/Mezirow-Transformative-Learning.pdf.
- Mhlanga, D & Moloi, T. 2020. "COVID-19 and the digital transformation of education: What are we learning on 4ir in South Africa?" *Education Sciences* 10(7): 1–11. doi.org/10.3390/educsci10070180.
- Ogbonnaya, UI, Awoniyi, FC & Matabane, ME. 2020. "Move to online learning during covid- 19 lockdown: Preservice teachers' experiences in Ghana." *International Journal of Learning, Teaching and Educational Research* 19(10): 286–303. doi.org/10.26803/IJLTER.19.10.16.
- Pete, J & Soko, JJ. 2020. "Preparedness for Online Learning in the Context of COVID-19 in Selected Sub-Saharan African Countries." *Asian Journal of Distance Education* 15(2):37–47.
- Spaull, N & van der Berg, S. 2020. "Counting the cost: COVID-19 school closures in South Africa and its impact on children." *South African Journal of Childhood Education* 10(1): 1–13. doi.org/10.4102/sajce.v10i1.924.
- Taylor, EW. 1998. Available from: Centre on Education and Training for Employment, 1900 Kenny Road, Columbus, OH 43210-1090.
- Wahab, A & Ali, W. 2020. "Online and Remote Learning in Higher Education Institutes: A Necessity in light of COVID-19 Pandemic." *Higher Education Studies* 10(3). doi.org/10.5539/hes.v10n3p16.