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# Lecturers' Views on the Functionality of e-Portfolio as Alternative Assessment in an Open Distance e-Learning

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**Abstract:** Technological advances and the Coronavirus disease (COVID-19) pandemic have forced higher education institutions to be innovative in delivering education in their countries. E- assessment using e-portfolio illustrates the importance of assessment practices that promote constructivist perception, allowing students to create their own learning as active participants through innovative learning and assessment activities. The purpose of this paper was to explore lecturer's understandings on the functionality of e-portfolio as an alternative assessment in an Open Distance e-Learning (ODeL). For this qualitative study, within an interpretative paradigm, interviews were conducted with four lecturers using thematic approach. The findings revealed that e-portfolio is beneficial for assessment in the ODeL as it allows students the opportunity to self-embrace their learning, e-portfolio enhances student-centeredness through authentic assessment practices. However, e-portfolio is not implemented to its potential due to challenges and constraints experienced by lecturers. Based on the findings, it is recommended that training workshops beneficial for lecturers should be conducted at the beginning of the course/module on how to create their e-portfolios. Furthermore, an e-portfolio assessment framework to be facilitated for the successful implementation of e-portfolio assessment strategy.

Keywords: Authentic assessment, e-portfolio, open distance e-learning, traditional assessment.

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## Introduction

Higher education in South Africa is faced with changes in teaching and learning due to demands of the Fourth Industrial Revolution (Marwala, 2020). The employers require that 21st century graduates should be skilled with, digital literacy, problem solving, decision-making and critical thinking skills (Sutherland, 2020). The world cannot afford to produce graduates who are not ready for the working environment in which qualities of information and data are fast, contested and fluid (Prinsloo et al., 2011). The corporate world insists that graduates should be computer-literate. The use of technology use has transformed the education world; thus, education is not limited to four walls of the classroom and time due to its full utilisation. Distance education uses technological resources and tools to provide education to the masses globally (Bates, 2015). Thus, the use of online teaching and learning plays a key role in students learning achievement. Consequently, assessment of students in higher education needs to be in line with the online teaching and learning (Baleni, 2015). Orsmond et al. (2000, p.24) argues, "assessment tends to shape every part of the student learning experience". In view of the latter, assessment shapes what and how our students learn. It is, furthermore, the means by which educators evaluate student achievements and it ultimately, forms the basis on which a qualification is awarded. Assessment relied on traditional assessment which are lower levels of Bloom's Taxonomy promoting rote learning and the memorisation. Students tend to become passive, memorising content rather than comprehending it (Altay, 2014,). To become a competent in the work environment, it is not only necessary to master the content knowledge and technical skills of the discipline (Guzzomi et al., 2017). Other competencies such as critical thinking and problem solving, decisionmaking, communication, collaboration and innovation

(Altay, 2014) are also required to become a competent being. Given the traditional assessment such as examination it is difficult to foster deep learning, that requires the construction of knowledge, reflection and collaborative work, which limits the achievement of central objectives of higher education (Endedijk et al., 2014).



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Improving the assessment process can provide effective support for the development of the skills graduates need to become competent in their respective (Medland, 2016). One approach for making this transition is to follow the principles of authentic assessment (Salirawati, 2021). Authentic assessment is a way to relate learning and work, creating a correspondence between what is assessed in the university and what graduates are expected to have acquired throughout their learning process in the outside world (Salirawati, 2021). It has an impact on the quality and depth of learning achieved by the student and the development of higher-order cognitive skills (Ashford-Rowe, et al., 2014). It can support students' growth in personal confidence and autonomous practice (Serrano, et al., 2018). Moreover, it can improve academic engagement (Kearney & Perkins, 2014), motivation (Nicol et al., 2014), self-regulation and metacognition (Landrum, 2020). To achieve the 21st century skills the use of technology enhanced learning has brought assessment strategies that alternate the traditional assessment, this includes, take- home assessments (including timed assessments and Multiple Choice Questions (MCQs), portfolios (online and e-portfolios), webinars, peer review assessment and continuous assessment (Nkalane, 2018).

The ODeL university under study, has been using blended learning. However, the rapid and dynamic changes brought by technology use in online teaching and learning have forced the university to review its assessment practices. The university like many other, has adopted the use of alternative assessment tools for almost five years. Since then, lecturers have different perceptions and views regarding the use of e-portfolios for assessment purposes. Amongst its alternative assessment approach, employs portfolios and e-portfolios. The use of hard copy portfolio has yielded some good assessment practices results regarding involvement of students in their learning and authentic assessments that depicts real life situations (Van Wyk, 2017). Thus, e-portfolio has been introduced to encourage online assessment to equip students with the various competency skills. However, the move to e-portfolios as assessment tool has brought benefits and limitations. It is established that the lecturers understood the changes that was brought by this form of assessment. But during the use of e-portfolio assessment came with challenges that hinders its effective functionality to develop skills such as creativity, problem solving and critical thinking. Hence this study undertook to establish the experiences of ODeL lecturers in using the e-portfolio as an alternative assessment approach. It is therefore against this background that the researcher seeks to undertake this study to answer the below research question.

# Research Question

How does lecturers experience the functionality of e-portfolio as an alternative assessment strategy in an ODeL context?

# Research Objective

The purpose of this paper was to explore lecturers' experiences on the functionality of e- portfolio as assessment for learning in an ODeL context.

# Literature review

A portfolio hard copy or digital (also known as the e-portfolio) as a living document with space to gather, organise, and present learning activities such as journals, work samples, and assignments that showcase various competencies that students have developed in their respective courses or module (Barrett, 2011). Van Wyk (2017) argue that a number of activities from the e-portfolios can provide evidence, that include written assignments for creative writing, a research project, reflective journals entries, podcasts, blog postings, PowerPoint presentations and digital video clippings (DVDs) and others. The e-portfolio pedagogy can be used as an alternative method of assessment to showcases skills and achievements, and reflection and uses appropriate of communication modalities (Boulton, 2014; Boulton & Hramiak, 2012; FitzPatrick & Spiller, 2010). The development of the e-portfolio is regarded as a process with a series of stages, with each step having its own objectives and activities required to access the product (Buzzetto-More, 2010). Throughout the process of collecting, compiling and reflecting on authentic evidence, students in their respective studies are taking ownership of their learning as they strive to produce the best possible e-portfolio (Buzzetto-More, 2010). It is worth noting that there are several definitions of an e-portfolio, however, scholars like Jimoyiannis (2013) agree that the eportfolio encompasses both a process and a product. The e-portfolio as a process, allows students to move beyond learning for the sake of learning and apply knowledge, skills and values found in real life situations. Through this learning process, students build their knowledge by completing various learning activities as formative assessments leading to summative assessment. This allows them to build on their competencies through the feedback received from their peers and instructors (lecturers). The final portfolio product that is presented at the end of the semester or year, with the goal of which is to document student learning providing evidence of knowledge, competencies, and skills (Lokollon & Kundre, 2021). The portfolio also identifies competencies students have acquired whilst taking the course, in relation to each of the learning activities undertaken. In this way, the portfolio serves as an instrument of self-reflection, providing students and the teaching team (lecturers and instructors) with a retrospective view of their personal learning successes, as measured by the course objectives and learning goals (Barrett, 2011). These e-portfolios can be used for multiple purposes depending on the context of their use, however, for this study; the assessment portfolio will be the focus of this study.

# Theoretical framework

Student centeredness play a key role in the 21st century teaching and learning. This study is foregrounded within the social constructivist and self-directed learning theories. A constructivist-learning environment "posits that knowledge is not passively received from the world or from authoritative sources but constructed by individuals or groups making sense of their experiential worlds" (Mazlan et al., 2015). In line with using e-portfolio, students are not only passive recipients of information, it encourages active involvement of students in their learning. They become active, reflective, and critical thinkers by taking responsibility for their own learning and learn to build knowledge on their own by linking new information with their prior knowledge (Mazlan et al., 2015). Brown (2019, p.7) concurs that, "a range of small tasks throughout the learning process can ensure that participants are actively engaged in learning activities that can culminate in the final assessment". This theory supports the active involvement of students, as they are able to construct meaningful knowledge from all the learning activities developed in their e-portfolios. Self-directed learning theory on the other hand, is "a process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes" (Knowles, 1975, p.18). Therefore, with the implementation of e-portfolio, students are exposed to taking ownership of their studies. Song (2021) concur that selfdirected learning in online learning environments is structured along three dimensions, the learners' personal attributes; the learning processes elaborated (planning, monitoring, evaluating) and the learning context (i.e., recourses, strategies, nature of tasks). Using e-portfolio through the two theories puts students in a position of being lifelong learners with the learning activities designed to support students in constructing knowledge, meaning and understanding of learning content.

## Methodology

## Research Design

This study employed an interpretivist approach aimed at examining lecturers' experience. A case study design with the aim of getting holistic picture on the phenomenon under study was employed. The case study strategy enables the researchers to describe and explain issues related to the research that might not otherwise be accessible through other methods of inquiry (Denscombe, 2010).

## Sample and Data Collection

The research participants comprised four lecturers involved in implementing e-portfolio use in their modules as an alternative assessment strategy. The study was conducted in 22018/2019 students involved in the year e-portfolio year modules. The research participants were chosen because they have lived experience of and were involved in the e-portfolio use as the phenomenon under investigation (Creswell & Creswell, 2017).

## Sampling procedures

The study employed purposive sampling as a means to enable the researchers to get the best information from the people most likely have the experience or expertise to provide quality information and valuable insights on the research topic (Denscombe, 2010). Purposive sampling is 'handpicked for the topic' (Denscombe, 2010 p 34), and, for the current study, purposive sampling was utilised because the researchers selected a small number of participants deliberately and consciously to obtain first-hand and in-depth accounts from the participants, whilst gaining as diverse information as possible. The four lecturers were purposively selected given they're with lived experiences of using e-portfolio as alternative assessment strategy. This type of sampling aimed to ensure that the sample is as diverse as possible to be able to identify a full range of perceptions and perspectives that are associated e-portfolio use and its functionality.

## Data Collection

The semi structured interviews with four lecturers were conducted and transcribed verbatim from digital audio recordings. The semi-structured interview took about 30-45 minutes allowed the researchers to gain the participants' 'views, understandings, interpretations [as well as] experience (Richards, 2020) regarding Ethical considerations of confidentiality and pseudonyms were adhered to and participants were informed that they can withdraw from the study at any given time.

# Analysing of Data

The interview data were analysed using thematic analysis (Braun & Clarke, 2006). The interview transcripts were analysed separately by identifying quotes using keywords related to the major aspects of investigation and then summarising the main points of selected quotes in each transcript. Then the researcher decided on a set of main points that summarized lecturers' views. These main points were condensed into categories, from which codes were developed to further analyse the transcripts. Ultimately based on the coded transcripts, emerging themes were identified. The four

key themes were generated, which were illustrated with selected quotes and related to themes in the literature to draw conclusions.

Finally, the credibility of the current study was maintained by continuous engagement with the participants to build trust during the data collection process and the data analysis. To ensure the trustworthiness of the current study, researcher employed purposive sampling, dense description and to link the reader to the context of the study through providing details about the context of the study to help themselves to gain insight and draw conclusions (Creswell & Creswell, 2017). The researcher provided argumentative interpretations to the data backed by concert evidence to ensure that their explanations and interpretations are the most reasonable for others.

## Findings

During the interviews, lecturers (participants) shared their overall experiences; views and perceptions on how they understand the educational value, coherent and cogent use of e-portfolio assessment were explored. The three key themes emerged from the study relevant to lecturer's experiences of e-portfolio assessment in their modules, each pointing towards the direction in which e-portfolio assessment tool can be enhanced and the changes experienced that needed to be addressed for its successful implementation for future use.

## Educational Value of an e-Portfolio as Alternative Assessment

The e-portfolio can demonstrate application of theory through the practice in the assessment tasks completed by students. The participants referred to the e-portfolio assessment tool as a beneficial and valuable instrument to use. The participants pointed out that the alternative assessment brings into their modules more affordances and opportunities for creativity than the traditional assessment. The lecturers stated that when they used venue-based examinations as their summative mode of assessment, student learning was not sufficiently demonstrated as it mainly focused on assessing knowledge without application of real-life situations. The e- portfolio, as an alternative assessment, can display the student knowledge, skills, and values learnt in the module and serve as evidence of continuing professional development.

The activities that my students complete [provide as evidence] in the e-portfolio, they [are] developed and designed over a period. I have also noticed that unlike the end of semester exams ... alternative assessment provides continuous learning with [equip them with skills]. (Participant PK06, interview, 12 May 2018) allowing students to demonstrate real learning in their different professions. Although in this context the e-portfolio is mostly used as summative tool, lecturers also highlighted the importance of the on-going learning process throughout the design and development of an e- portfolio. Initially, lecturers were trained on how to use e-portfolio for teaching and learning. Even though some lecturers were, for a number of reasons, compelled to use the e-portfolio, and others were novices, during in the process of using the e-portfolio, they realised its value. I have inherited this module from the previous lecturer, through trial and error and through practice, I realised that this type of assessment is more advantageous to my students than once off examination, I had to do authentic assessment tasks. (Participant MM04, interview, 14 June 2018).

Furthermore, the findings of this study revealed that e-portfolio offered constructivist assessments wherein students are involved in their learning throughout. A significant number of participants acknowledged the fact that the e-portfolio tool can expose students and the lecturers to various assessment methods and empower students with knowledge in various ways. Students become involved in the assessment process, therefore have the understating of the assessment processes, standards and criteria set, as well as developing technical skills through an electronic assessment.

Some of the students could not use the computer but interaction with other students and practice opened their eyes and increased the broader technology learning. (Participant MM01, interview, 28 May 2018) I can see the positive side of this system in terms of improving the student's ability to use the internet to search for information and putting those useful resources in their computer and its application. (Participant PK06, interview, 12 May 2018)

Both participants were positive about the development of student learning, in not only content knowledge but also skills and competencies, particularly technical skills needed for the 21st century.

Participants continue to highlight the value of the use of the e-Portfolio expressing how feedback and reflection as well as access to resources are used as tools to support their students.

Since I started using the e-Portfolio for teaching in my module, I realised that it supports the reflection of knowledge and skills throughout the module. From the student's result, I can see the improvement of students' work every time they get feedback. This is happening with the aids of extra resources from websites, instructor's comments and peer assistance. (Participant MM04, interview, 18 June 2018)

Based on the above extracts, it appears that the move to an alternative assessment such as the e-portfolio has been beneficial as the result, where assessment is continuous, authentic and creative, and has a positive effect on student

learning. As such, it seems that lectures would like to continue using the e-portfolio as a way of assessing their students, seeing this alternative assessment as one of value in enhancing student learning.

#### e-Portfolio as a Constructivist Assessment Tool Enhancing Student-centeredness through Authentic Assessment practices

In this sub-theme, lecturers emphasised the use of the e-portfolio as it enhances student-centred learning through authentic assessments practices. In using the e-portfolio, lecturers expose students to constructivist and authentic learning approaches. This implies that students are actively involved in their learning by creating knowledge, using authentic learning through real- life situations or simulations and role-plays. A significant number of participants revealed that they use different assessment tasks, methods and techniques in their modules in order to expose students to various learning opportunities. The lecturers explained that student-centeredness is displayed as one of the benefits of e-portfolio-use as student get involved in the whole process of assessment and are able to make sense of the instructions given to produce good quality assessment tasks. This is confirmed by the fact that the theory learnt is being practiced through different assessment tasks expected in their e-portfolio. This authentic learning at higher education level is vital, as students need to learn important skills for use beyond graduation.

*My* students are active participants in their studies they do the work, ask questions, research and plan and organise themselves in their learning. The assessment feedback also helps them to become active by working constantly on improving themselves and [they] are motivated by what they can do best. (Participant GM03, interview, 16 June 2018).

Participant responses confirm the importance of a constructivist approach to learning as the assessments are authentic and encourage student-centred creation of knowledge and development of skills and competencies through the assessment activities as they design and develop their E-portfolios.

## Creating Opportunities for Collaboration among Students

In the context of ODeL institution, by creating the online platforms students are given an opportunity to create, share and collaborate among themselves, a difficulty in that often students are geographical separated and rarely meet face-to-face. The e-portfolio encourages students to interact electronically when working on their e-portfolio, giving opportunities for peer feedback and reflection on their work. Learning from each other as peers is an alternate way of learning and highlights student-centred learning.

The findings of this study have revealed that the students are no longer isolated but can connect with other students through the various electronic platforms. This means that students are able to work together on various assessment tasks that require group work and peer assessment. However, in this study participants confirmed that students were willing to work together even outside the online platforms but used social media like WhatsApp to engage in discussions about their work as groups or to communication with the lecturers to comment on questions posed regarding a particular assessment activity. However, initially, not many students participated which affected their task outcome. However, the alternative assessment ensured that:

... they are forced to work in groups in the sense that some of the activities will tell them to form groups of four and complete the table in relation to a research activity, or and when forming the groups... ask for group members from there, so that they then can collaborate, form WhatsApp groups and complete that particular activity. (Participant NP05, Interview, 25 May 2018)

Collaboration among students creates opportunities for them to share ideas, peer review and provide feedback bridging the gap between students and lecturers.

## e-Portfolio Challenges and Constraints

Various issues and challenges emerged from the interviews when participants were asked about their experiences in using the e-portfolio tool for assessment. The participants highlighted challenges and constraints experienced when implementing e-portfolio for assessment. The following sub-themes emerged:

## Lack of Digital Literacy

There is a general view that the students in the era of technology are well conversed with its use. However, with some of today's millennials there is still a lack of digital literacy skills as individual students have different background regarding technology use. The participants stated although ODeL institution tends to attract young adult learners, amongst them there are those who are digital natives who can use technology, and some are digital strangers. These digital strangers are students, who rarely use technology, have never exposed to it, or have had no access to ICTs whilst growing-up or at school. In addition, both these types of students, particularly those based in remote areas across the country, are challenged by network connectivity and therefore find e-portfolio- use a disadvantage to their academic

progress. As a result, it becomes challenging to work on e-portfolio with ease and some end up not being able to submit because challenges faced.

However, it seems that the same students are able to use the Internet for to access social media with applications such as Facebook, Twitter, Instagram, and WhatsApp. Although some students experience challenges such as technology resources like computers and laptops many lecturers encourage their students to use technology. Participant MM04 stated, "I encourage my students to use technology effectively for their education" (Interview, MM04, 18, June

2018). The interviews with lecturers revealed that with time, students come to realise the need to learn how to use technology effectively for learning purposes. This study has revealed that even though lecturers are willing to move to alternative online assessments, the lack of digital literacy is a challenge and serves to confirm the central position that lack of technology and its accompanying skills affects student-learning practices.

They do both, like I said we are trying to go over, but there are still students, they don't have computers, they don't have internet connections. (JO02, interview, 24 May 2018)

It is worth noting that in first world countries, students are fully exposed to digital literacy like e-portfolios, in the early ages of their education and develop the necessary technology skills as they progress. The study has revealed that participants believe that student, e-portfolio-use is difficult for undergraduate students in South Africa, since they were not exposed to technology- based assessment like e-portfolio tool during their primary and secondary school. Therefore, participants pointed out those undergraduate students are not ready for e-portfolio-use as this is a new innovative assessment to which they need to become accustomed in time.

I still do not think that my students (undergraduates) will be in a position to work with an e-portfolio... there will [is] little time for them to still have to master the skills and time to generate and maintain an e-portfolio. Participant PK06, interview, 12 May 2018).

Some of the lecturers expressed that for some students, technology-use (e-portfolio) is new to them but further highlighted that if the e-portfolio can be more interactive from the beginning, for students to work on the e-portfolio site throughout their learning process, practice throughout the learning process will be helpful. The recommendation is that the more practice with e-portfolio the student is involved in the quicker, they will be able to get used to it.

As an ODeL student lecturer, and myself I enjoyed the development and maintenance of an e-portfolio. I found it very interesting and challenging. However, I must add that I look at these possibilities as an academic and having a very close relationship with many of my students as a work integrated learning WIL mentor. e-portfolio is still too new a technology for most of my students. Participant MM04, interview, (18 June 2018)

Some lecturers indicated their challenges with digital literacy skills as they had previously never offered online teaching and learning. Some have had to take over modules from other lecturers without a proper introduction or induction into the e-portfolio teaching context and have had to learn from their peer lecturers.

.... So he was the one who was giving me guidance until at least I do have a light in this e-portfolio. I went down to the ICT, trying to tell them that I don't know this e-portfolio... (Participant MM04, interview, 18 June 2018)

Most participants emphasised the importance of student digital literacy. In particular, in the ODeL context the use of alternative assessment is relevant for many reasons, as indicated in the literature review, and cannot be disregarded as a tool to enhance alternative assessment and thus student learning. However, findings indicate that lecturers still find e-portfolio-use complex and not user-friendly for students.

# Lack of Technical Assistance

During the initial introduction of alternative assessment project, the ICT department was included as supporting personnel to assist lecturers and students with e-portfolio-related challenges. The teaching and learning pedagogy and modalities acknowledged that optimal implementation of the e-Portfolio requires a robust, stable, cutting-edge ICT infrastructure and platform. However, the findings revealed that there is lack of technical assistance to support lecturers for them to be able to work with students inside the portfolio

I went down to the ICT, trying to tell them that I don't know this e-portfolio, can you just give me time, just to show me, just to guide me how to work on this, you know what, it was a struggle because we kept on setting the appointments no one came to us, until I sat down, last year, I told myself that I am going to do this and I will get it right. (Participant NP05, interview, 18 May 2018)

Lecturers pointed out that, as they inherited the modules from the previous lecturers, they were left in the dark without proper hand-over of the modules and without training and development. They had to learn how to navigate the e-portfolio themselves. A lecturer mentioned that she had attended the continuous professional development workshops that had helped to a certain extent but, because continued for a limited time, did not fully equip the lecturer with the necessary skills.

## Discussion

The results of this study were summarized under the following themes: Creating opportunities for collaboration among students, educational value of an e-portfolio as alternative assessment, e-Portfolio as a constructivist assessment tool enhancing student-centeredness through authentic assessment practices, e-Portfolio Challenges and Constraints. From the findings of the study, it appears that the move to alternative assessment approach such as the e-portfolio has been beneficial as the results, where assessment is continuous, authentic and creative, have had a positive effect on student learning. As such, it seems that lectures would like to continue using the e-portfolio as a way of assessing their students, seeing this alternative assessment as one of valuable means in enhancing student learning.

All lecturers were positive about the alternative assessment approach and took a conscious decision to embrace it, considering the Senate decision to implement the mandate of exploring e-portfolio use in their modules. They saw the opportunity to expand the alternative assessment approach by creating learning opportunities for the students in their respective modules. Nevertheless, certain lecturers who experienced challenges, decided to revert to a traditional assessment approach. Some lecturers faced challenges, such as, lack of the required digital literacy skills and confidence to execute their responsibilities using the e-portfolio in the module.

Lecturers who continued with e-portfolio use expressed the fact that greater understanding of the use and purpose of the e-portfolio in their modules has been developed. One interviewee noted that artefacts included in the e-portfolios were creative and innovative and demonstrated student learning based on the learning outcomes and set standards. The article reported that despite the many challenges related to the alternative assessments conducted since its commencement in 2013, the e-portfolio has shown a significant improvement in its purpose, understanding and use. Since its inception, the e-portfolio is still the most used alternative assessment approach in the university mainly in the undergraduate modules (Brown, 2019; Salirawati, 2021). Currently the e-portfolio assessment tool is organised around the best pieces of work in which students are expected to expose clear understanding of learning outcomes, goals, and objectives intended in the module content that demonstrate effective and lifelong learning (Van Wyk, 2017). In view of this report, lecturers understand why the purpose and use of e-portfolio as an assessment tool. As noted by Salirawati (2021) student learning is gradually improving with every semester or year of e-portfolio use and as a result, one can conclude that both lecturers and students welcome the initiative of e-portfolio as alternative assessment approach, with the same sentiments. It is heartening to see that there are lecturers who have staved the course being innovative and resourceful in e-portfolio use. Most importantly, through eportfolio use students are doing their best to improve the learning. Furthermore, numerous scholars spelled out that the e-portfolio can serve different purposes in education mainly for student development to instill values of lifelong learning, self-directed learning and professional development in their different professions (Barrett, 2011; Salirawati, 2021; Song, 2021; Van Wyk, 2017). An e-portfolio can primarily focus on personal learning environments that place emphasis on reflective practice for students (Lokollon & Kundre, 2021; Oakley et al., 2014). In addition, an e-portfolio is able to track student development and connections over time, across courses and programmes to instil values of lifelong learning, self-directed learning and professional development (Lokollon & Kundre, 2021; Nkalane, 2018). The e- portfolio supports the process of learning through reflection, discussion and formative and summative assessment (Goulding et al., 2015; Whitelock, 2011). Finally, the e-portfolio provides students with constructive feedback of their learning activities every step of the way.

Therefore, a properly designed e-portfolio can facilitate active student engagement, guidance and support, collaboration and reflection on their learning, which leads to enhanced awareness of their own learning needs (Lokollon & Kundre, 2021; Yang et al., 2016). In this regard, e-portfolios are regarded for their effectiveness and efficient use as teaching, learning and assessment tools promoting lifelong student learning and self-directed learning. Therefore, using e-Portfolios for enhancement of student learning serves different purposes that benefit learning growth (Van Wyk, 2017). One would argue that these findings are essential for lecturers to understand the purpose of using e-portfolio as an assessment strategy in order to design relevant assessment tasks and provide guidance to students.

However, despite the positive feedback from lecturers about their experiences of e-portfolios use, some experienced challenges. Some interviewees indicated that they were not appropriately empowered with digital literacy skills were challenged when navigating the e- portfolio site or assessing tasks throughout the modules. Lack of digital literacy competence was a hindrance, as lecturers found difficulty in applying technology skills to assess student evidence in the e-portfolios, particularly the final summative assessment submissions (Van Wyk, 2017). This study in line with Brown (2019) emphasises the importance of digital literacy not only to students (the millennials) but also to the lecturers who need to keep up with developing trends in technology and 21st century skills, which incorporate technology. However, although lecturers did attend training on the e-portfolio, some lecturers took over modules without having had training, which made the process challenging.

Initial training on new technology is crucial in order to ensure the smooth running of the module using the relevant technology. Although initial training was given to lecturers who elected to include e-portfolio as an alternative assessment, and some lecturers who took over modules from lecturers who had left, mentioned that they had never attended training. This means that

at times lecturers were given e-portfolio modules to teach without full training on using e- portfolio for teaching; learning and assessment with the assumption that they are digitally literate. Based on the findings, this study sheds further light on the significance of lecturers not being sufficiently trained concerning e-portfolio use. One would argue that it is early days to be expecting good progress since alternative assessment is new in the university. However, I find it important that training of lecturers, old and new, should be compulsory and on a continuous process. Van Wyk (2017) who argue that in order for effective independent learning with e-portfolios to take place, lecturers, support this recommendation and students need to be technologically competent.

Technical assistance was also identified as an issue experienced by lecturers. It was noted in the interviews that lecturers had little support from the ICT department in terms of technology when trying to access the e-Portfolio and that this lack of support was a constraint that hindered the implementation of e-portfolios use. Kwok and Hui (2018) reinforce the importance of having support from support departments such as ICT. The authors considered it key to the success of the programme in that on-going technical support of lecturers on e-portfolios use will yield good results. In the researcher's view, the ICT department role is to offer support and guidance, thus working hand-in-hand with lecturers is crucial.

Barrett's (2011) study showed that lack of technology availability, and not lack of technical skills, was a constraint in using e-portfolios. In this study, the interviewees noted that poor technical skills and lack of technical assistance from ICT hindered the use of e-portfolios but also challenges with software arose. Participants shared their experiences in using neither learning management system, which is synchronised nor site interactive.

In summation, interviewed lecturers report that there is a general acceptance of the e-portfolio as an assessment tool but feel that the challenges experienced hinder the progress. Hence, some lecturers reverted to the traditional assessment or printed hard copy portfolios and others use traditional assessment for summative assessment.

## Conclusion

This study reports on lecturers' views of using e-portfolio for formative assessment in Open Distance e-Learning and the findings confirmed that most lecturers were positive about their experiences and found the e-portfolio use for assessment during the course useful and beneficial. The findings further revealed that e-portfolio use is not implemented to its full potential due to challenges experienced by lecturers. Based on the findings, this study recommends an e-portfolio assessment framework to be facilitated for the successful implementation of e-portfolio assessment strategy. However, these findings cannot be generalised to all ODeL institution and other institutions of higher learning.

## Recommendations

This paper focused on the e-portfolio use as an alternative assessment in ODeL environment with the aim of understanding lecturer's experiences in this phenomenon. This paper is part of a PhD study focusing on the qualitative phase findings of the study. The study has revealed that e-portfolios are benefial to students' assessment in the ODeL as it allows them the opportunity to self-embrace their learning. These students can reflect on their learning thus informs them on their achievement.

For the e-portfolio use to be well functioning in the context of ODeL and institutions in developing institutions it is recommended that lecturers as module developers should be capacitated through workshops on how to plan curriculumbased activities on e-portfolio for their modules that require twenty-century competency skills. The e-portfolio should be introduced to students through as formative assessment rather than for summative to allow students to gradually engage with their eportfolios. Ultimately, students need to be oriented on

how to work within the e-portfolio site students at the beginning of the study duration and the academic staff should be trained to create, evaluate and use e-portfolios. Moreover, it is vital that further research should be conducted to improve the use of e-portfolio for teaching, learning and assessment to foster formative and summative assessment. With all these recommendations, this calls for the development of an e-portfolio framework that can guide lecturers in the process of e-portfolio in order to standardise the use in the ODeL environment.

# Limitations

This study focused only one ODeL institution in a developing country and therefore the study cannot be generalised. Therefore, findings of this single case study cannot be generalised. The results of this qualitative inquiry and conclusions could be seen as being applicable to an ODeL context only. Furthermore, a study comprising a bigger sample should be undertaken to investigate the lecturers' views on the functionality of e-portfolio as alternative assessment in an Open Distance eLearning could yield different results.

# **Ethical considerations**

All the participants gave informed concerned and written consent. The Ethics Research Review committee at the college of education: University of South Africa (ref: *2018/03/41146905/06/MC*) gave ethical approval. Anonymity and confidentiality were adhered to throughout the study.

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#### References

- Altay, B. (2014). User-centered design through learner-centered instruction. *Teaching in Higher Education, 19*(2), 138-155. <u>https://doi.org/10.1080/13562517.2013.827646</u>
- Ashford-Rowe, K., Herrington, J., & Brown, C. (2014). Establishing the critical elements that determine authentic assessment. *Assessment & Evaluation in Higher Education*, 39(2), 205-222. https://doi.org/10.1080/02602938.2013.819566
- Baleni, Z. G. (2015). Online formative assessment in higher education: Its pros and cons. *Electronic Journal of e-Learning*, 13(4), 228-236.
- Barrett, H. (2011). Balancing the two faces of e-portfolios British Columbia: Ministry of Education. *Innovations in Education*, *3*(1), 6-14.
- Bates, A. W. (2015). *Teaching in a digital age: Guidelines for designing teaching and learning*. TEACHONLINE.CA <u>https://bit.ly/3oj6yvN</u>
- Boulton, H., & Hramiak, A. (2012). E-flection: *The development of reflective communities of learning for trainee teachers through the use of shared online web logs. Reflective Practice, 13*(4), 503-515. <u>https://doi.org/10.1080/14623943.2012.670619</u>
- Boulton, M. J. (2014). Teachers' self-efficacy, perceived effectiveness beliefs, and reported use of cognitive-behavioral approaches to bullying among pupils: *Effects of in-service training with the I DECIDE program. Behavior therapy*, 45(3), 328-343. <u>https://doi.org/10.1016/j.beth.2013.12.004</u>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, *3*(2), 77-101. https://doi.org/10.1191/1478088706qp063oa
- Brown, J. D. (2019). Assessment feedback. *Journal of Asia TEFL*, 16(1), 334-344. https://doi.org/10.18823/asiatefl.2019.16.1.22.334
- Buzzetto-More, N. (2010). Assessing the efficacy and effectiveness of an e-portfolio used for summative assessment. *Interdisciplinary Journal of e-Learning and learning Objects*, 6(1), 61-85. <u>https://doi.org/10.28945/1164</u>
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches.* Sage publications.
- Denscombe, M. (2010). *The good research guide: For small-scale social research projects (Open UP Study Skills).* McGraw-Hill.
- Endedijk, M. D., Brekelmans, M., Verloop, N., Sleegers, P. J., & Vermunt, J. D. (2014). Individual differences in student teachers' self-regulated learning: An examination of regulation configurations in relation to conceptions of learning to teach. *Learning and Individual Differences, 30*, 155-162. <u>https://doi.org/10.1016/j.lindif.2013.12.005</u>
- FitzPatrick, M. A., & Spiller, D. (2010). The teaching portfolio: Institutional imperative or teacher's personal journey? *Higher Education Research & Development, 29*(2),167-178. <u>https://doi.org/10.1080/07294360903470985</u>
- Goulding, J., Bloomfiel, D., & Reimann, P. (2015). An analysis of how the teaching practicum is assessed in Australia and resulting potentials for IT innovation. In P. Vaz-Rebelo, A. Swennen, M. Golan, M. van der Klink, C. van Velzen, Margarida, P. de Lima, J. Vermel, C. Barreira, T. Pessoa, & Celeste Gomes (Eds.), *Proceedings of 4th ATEE Winter Conference: Professional development of teacher educators-Bringing together policy, practice and research* (pp. 213-224). Association for Teacher Education in Europe.
- Guzzomi, A. L., Male, S. A., & Miller, K. (2017). Students' responses to authentic assessment designed to develop commitment to performing at their best. *European Journal of Engineering Education*, 42(3), 219-240. https://doi.org/10.1080/03043797.2015.1121465
- Jimoyiannis, A. (2013). Developing a pedagogical framework for the design and the implementation of e-portfolios in educational practice. *Themes in Science and Technology Education,* 5(1-2), 107-132.
- Kearney, S. P., & Perkins, T. (2014). Engaging students through assessment: The success and limitations of the ASPAL (Authentic Self and Peer Assessment for Learning) Model. *Journal of University Teaching and Learning Practice*, 11(3) 1-14. <u>https://doi.org/10.14453/jutlp.v11i3.2</u>

- Knowles, M. S. (1975). *Self-directed learning. A guide for Learners and Teachers*. Englewood Cliffs, NJ: Prentice Hall Regents.
- Kwok L. F., & Hui Y. K. (2018). The role of e-portfolio for smart lifelong learning. In V. Uskov, J. Bakken, R. Howlett & L. C. Jain (Eds.), *Smart universities: Smart innovation, systems and technologies* (pp. 327-356). Springer. https://doi.org/10.1007/978-3-319-59454-5 11
- Landrum, B. (2020). Examining students' confidence to learn online, self-regulation skills and perceptions of satisfaction and usefulness of online classes. *Online Learning*, *24*(3), 128-146. <u>https://doi.org/10.24059/olj.v24i3.2066</u>
- Lokollon, L., & Kundre, J. (2021). Development e-portfolio as a model of authentic assessment. *Edu Sciences Journal*, *2*(1), 29-37. <u>https://doi.org/10.30598/edusciencesvol2iss1pp29-37</u>
- Marwala, T. (2020). *The fourth industrial revolution in higher education. in the responsive university and the crisis in South Africa 300-311.* Brill. <u>https://doi.org/10.1163/9789004465619\_014</u>
- Mazlan, K. S., Sui, L. K. M., & Jano, Z. (2015). Designing an eportfolio conceptual framework to enhance written communication skills among undergraduate students. *Asian Social Science*, *11*(17), 17-35. https://doi.org/10.1177/1469787417723244
- Medland, E. (2016). Assessment in higher education: Drivers, barriers and directions for change in the UK. *Assessment & Evaluation in Higher Education*, 41(1), 81-96. <u>https://doi.org/10.1080/02602938.2014.982072</u>
- Nicol, D., Thomson, A., & Breslin, C. (2014). Rethinking feedback practices in higher education: A peer review perspective. *Assessment & Evaluation in Higher Education, 39*(1), 102-122. https://doi.org/10.1080/02602938.2013.795518
- Nkalane, P. K. (2018). *E-portfolio as an alternative assessment approach enhancing self- directed learning in an Open Distance Learning environment* [Unpublished doctoral dissertation]. University of South Africa.
- Oakley, G., Pegrum, M., & Johnston, S. (2014). Introducing e-portfolios to pre-service teachers as tools for reflection and growth: lessons learnt. *Asia-Pacific Journal of Teacher Education*, 42(1), 36-50. https://doi.org/10.1080/1359866X.2013.854860
- Orsmond, P., Merry, S., & Reiling, K. (2000). The use of student derived marking criteria in peer and self-assessment. *Assessment & Evaluation in Higher Education*, 25(1), 23-38. <u>https://doi.org/10.1080/02602930050025006</u>
- Prinsloo, P., Slade, S., & Galpin, F. (2011). A phenomenographic analysis of student reflections in online learning diaries. Open Learning: *The Journal of Open, Distance and e-Learning, 26*(1), 27-38. <u>https://doi.org/10.1080/02680513.2011.538562</u>
- Richards, L. (2020). Handling qualitative data: A practical guide. Sage.
- Salirawati, D. (2021). Authentic assessment in the pandemic period. *Journal of the Indonesian Society of Integrated Chemistry*, *13*(1), 21-31. <u>https://doi.org/10.22437/jisic.v13i1.11716</u>
- Serrano, M. M., O'Brien, M., Roberts, K., & Whyte, D. (2018). Critical pedagogy and assessment in higher education: The ideal of 'authenticity 'in learning. Active Learning in Higher Education, 19(1), 9-21. <u>https://doi.org/10.4324/9780429294877</u>
- Song, B. K. (2021). E-portfolio implementation: Examining learners' perception of usefulness, self-directed learning process and value of learning. *Australasian Journal of Educational Technology*, *37*(1), 68-81. https://doi.org/10.14742/ajet.6126
- Sutherland, E. (2020). The fourth industrial revolution The case of South Africa. *Politikon: South African Journal of Political Studies*, 47(2), 233-252. <u>https://doi.org/10.1080/02589346.2019.1696003</u>
- Van Wyk, M. M. (2017). Exploring student teachers' views on eportfolios as an empowering tool to enhance self-directed learning in an online teacher education course. *Australian Journal of Teacher Education, 42*(6), 1-21. https://doi.org/10.14221/ajte.2017v42n6.1
- Whitelock, D. (2011). Activating assessment for learning: Are we on the way with Web 2.0? In M. Lee, & C. McLoughlin (Eds.), *Web 2.0-Based E-Learning: Applying Social Informatics for Tertiary Teaching* (pp. 319-342). IGI Global. https://doi.org/10.4018/978-1-60566-294-7.ch017
- Yang, M., Tai, M., & Lim, C. P. (2016). The role of e-portfolios in supporting productive learning. *British Journal* of Educational Technology, 47(6), 1276-1286. <u>https://doi.org/10.1111/bjet.12316</u>