Chapter 3
Special Needs Education Teachers' Experiences of the Use of E-Portfolios in the "New Normal" in Open Distance E-Learning Institutions in Southern Africa

Thomas M. Kaputa, Gistered Muleya, and Francis Simui

Abstract This chapter focuses on Special Needs Education Teachers enrolled in Open Distance Learning (ODL) intuitions focusing on electronic teaching and learning. The advent of disruptive technologies and the COVID-19 pandemic have transformed the face of teacher development, as they have disrupted the usual way of doing practical subjects. The COVID-19 pandemic, in particular, has pushed educators into new frontiers of assessments in the form of e-portfolios. The usual approach—i.e., the submission of physical files which would be assessed by examiners—is being replaced by online assessment. This paper addresses the resultant reactions of ODL institutions in response to the disruptions from students' perspectives. The adjustments made to traditional practicums and teaching practice and the submission of hardcopy assessment files are interrogated. Using a qualitative approach, Special Needs Education Teachers at two ODL institutions in Zimbabwe and Zambia shared their experiences during their practical work and proffered how these e-Portfolios could be handled. They recommended thorough training in e-portfolio management and highlighted implementation as paramount.

Keywords ODL · e-portfolios · Special needs education teachers · Online assessment · ICT

3.1 Introduction

This chapter focuses on the experiences of Special Needs Education teachers enrolled in two Open Distance Learning (ODL) intuitions in Zimbabwe and Zambia, specifically the assessment of e-portfolios in electronic teaching and learning. Students

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J. Olivier et al. (eds.), *Perspectives on Teacher Education in the Digital Age*,
Future Education and Learning Spaces,
https://doi.org/10.1007/978-981-19-4226-6_3

enrolled in Special Needs Education undergraduate degree programmes at the two ODL institutions revealed their experiences of the disruptions from their perspectives. The dawn of disruptive technologies and the COVID-19 pandemic have transformed teacher development assessment, as they have disrupted the usual way of assessing practical subjects. Studies show that the COVID-19 contagion has transformed education to new methods of assessments (Khan 2021), as the transformation of hardcopy portfolios to e-portfolios has been adopted (Syafei et al. 2021). The traditional approach in student–teacher assessment—i.e., the submission of physical files and assessment by examinees—is being replaced by online assessment in the "new normal" characterised by global COVID-19 health restrictions. Syafei et al. (2021) claim that this transition to e-portfolios is marked by a dearth of research to inform practice. This development has seen a surge in the level of civic awareness among learning facilitators of the use of online platforms to deliver education activities. This resonates well with what civic education does to those that get exposed to its ethos (Mwanangombe et al. 2020). Additionally, another study conducted by Muleya et al. (2019) on exploring learning related to digital platforms does confirm the power of civic education in raising civic awareness among the citizens in many areas not limited to e-portfolios.

Traditionally, the physical portfolio was marked and graded, and the student got feedback. The physical execution of the practicum and the submission, which are the aspects under study, are critical to the whole process, as they enable the marking and grading of the student's work. We interrogated the adjustments made in the traditional practicums and teaching practice and the submission of hardcopy assessment files. Online assessment entails a number of components and procedures which culminate in the compilation of the student's best work in an e-portfolio or file. Through a qualitative approach, Special Needs Teachers in the programmes shared their experiences during their practical work regarding challenges met and proffered ways of improving online assessment of e-portfolios in the departments.

3.1.1 Context of the Study

The study was undertaken at the Zimbabwe Open University (ZOU) in the Department of Disability Studies and Special Needs Education (DS&SNE) and at the University of Zambia (UNZA) at the Institute of Distance Education (IDE). These are associate institutions jointly offering selected degree programmes online (Simui et al. 2018). ZOU is a fully Open and Distance electronic Learning (ODeL) institution in Zimbabwe. UNZA is a dual-mode institution that offers degrees both face-to-face and online at IDE (Hamweete 2012). Both have electronic learning management systems (e-LMS)—MyVista for ZOU, and Astria at UNZA—that house the various programmes on offer. Teaching and learning of students in the two Special Needs Education degrees presented on MyVista for ZOU and Astra for UNZA have tended to cover all aspects except the practical construction and submission of practical work

files for assessment. Students upload all their assignments for marking and grading and get feedback within two weeks of submission.

The Special Needs Education programmes at the two institutions traditionally have a practical work component to enable the student to practise the theory learnt in taught courses. This practical aspect is crucial, as it prepares the student–teacher for the world of work. Kaputa and Gwitimah (2013) outline the theory and processes that students should do in the practicum, culminating in the construction of a physical portfolio of selected artefacts, supervision reports and narrative reports as evidence of work done. The theoretical aspect of these courses is covered in the online modules on both MyVista and Astra in preparation for the practicum. At both institutions, programme regulations guide how the practical work or practicum ensues at the selected locations. At DS&SNE, the practical work comes in the form of a practicum. The regulations require students to be attached to a location, which may be a school, hospital, workplace, or any other relevant place, focusing on their areas of expertise. An introductory letter introduces the student to the receiving institution to give access to the student. The students would do their practicum for a specified period before the assessment. After the period, the student compiles a file that contains all aspects of the work they would have carried out under the supervision of both local and university supervisors. Students place their work, including a narrative report, supervision reports and artefacts, as evidence in a file(s) and physically submit these to the departments for assessment. The submitted files are examination items that are marked using standardised marking guides. Announcement of the practicum results to the students is done together with other examination results.

The disruptive advent of COVID-19 and the resultant health restrictions stopped the above process as these jeopardised students' lives. The two institutions came up with alternatives to the practicum in the form of online provision of all aspects of the assessment process. Unforeseen changes to the use of e-portfolios and online submission became prerequisites for the students who had registered for the courses. Physical processes like online submission, marking and feedback were required from both the students and the course tutors. The research was undertaken to understand the different experiences of students who were using e-portfolios in their practical work and were required to submit them online. This would enable course tutors to finetune their e-portfolio assessments to ensure that their quality is equivalent to that of hardcopy submission. The main research question that directed this research was as follows: "How have Special Needs Education students managed the transition to the use of e-portfolios?".

3.1.2 Research Questions

The following research questions guided the study:

- What are Special Needs teachers' experiences with the submission of e-portfolios during their practical work?

- How did they manage e-portfolio online assessment challenges during the period?
- How can departments improve the management of e-portfolio assessments?

3.2 Literature Review

3.2.1 Theoretical Framework

The research was based on two theories: Equivalency theory (Simonson et al. 1999) and an integrated Multimodal Model for Online Education (MMOE) (Picciano 2017). According to Simonson et al. (1999), provisions for students in distance education (DE) programmes should be equal to those in face-to-face programmes. The designing of equivalent learning experiences for students in both ODL and face-to-face settings is advocated. The designing of online practical work procedures in ODL should, therefore, be equivalent to the physical submission of portfolios.

The MMOE theory explains the online provision of the segments on the electronic learning management system (e-LMS). Figure 3.1 illustrates that the MMOE theory is applicable for online and blended institutions, as it accommodates all teaching and learning processes.

The MMOE comprises seven segments that take place around a learning community. In this study, Special Needs teachers, course tutors and stakeholders in the practicum locations made up the learning communities of each respective university. Therefore, we can explain the various segments of single-mode and dual-mode

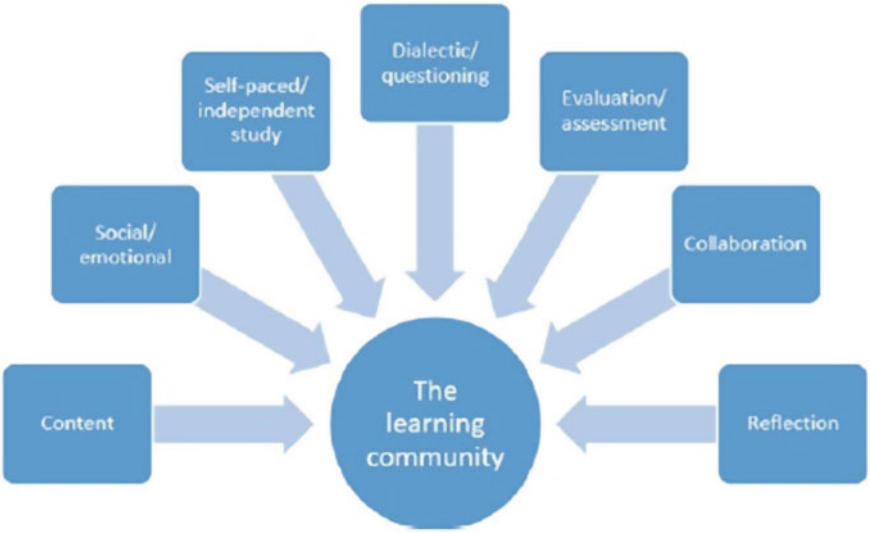

Fig. 3.1 Illustration of a multimodal model for online education (Picciano 2017)

universities. Single-mode universities' focus is on activities revolving around content on e-LMS and self-paced independent study using software for the practicum and assessment/evaluation of portfolios. Equally, according to Picciano (2017), dual-mode universities use a blended approach in their e-LMS content and focus on a self-paced independent study using software and assessment/evaluation of portfolios. Students in blended settings rely on the course tutor in comparison to those in ODL institutions. COVID-19 is a catalyst that propelled all universities to be fully online without the necessary technology. This dilemma was interrogated in this research. This study is focused on a self-paced independent study using software and evaluation/assessment of assignments, with a special emphasis on e-portfolios submission.

3.2.2 Special Needs Education Teachers' Experiences of the Submission of E-Portfolios

The use of portfolios as a component of practical work in education enables an all-round assessment of the student, as it dwells on all facets of learning. Students' ability to connect theory to practice enables educators to confirm that effective learning has taken place. According to Birgin and Baki (2007), portfolios are based on Piaget and Vygotsky's constructivism, which explains students' propensity to acquire and socially construct their knowledge and skills. By so doing, cognitive, affective and psychomotor skills are involved in the learning.

A portfolio has numerous definitions, as it finds use in a spectrum of areas, like commerce, fashion, and art. For education, we picked the definitions of Arter and Spandel (1992) and Paulson et al. (1991), who state that a learning portfolio is a collection of the student's best work which shows their effort in specified areas. Additionally, a learning portfolio is compiled over time to show the student's competencies (Barton and Collins 1997). The issue of authenticity is important, according to Collins (1992). Portfolios include a narrative (Kaputa and Gwitimah 2013) that displays the student's metacognitive abilities (Chick 2013) through reflection (Winsor and Ellefson 1995).

A portfolio can be physical or electronic. An e-portfolio comprises a collection of activities in an electronic format. Accordingly, it can be the electronic conversion of paper-based items placed in electronic files (Barrett 2007) or the carrying and uploading of activities online with constant reflection and feedback from self, peers and tutors (Scully et al. 2018). Assessment of e-portfolios is done online.

To address the focal point of this study, we needed to identify the components of an online assessment. Practical work is a component of online assessment, such as tests, exercises, assignments, interviews and presentations, among others. Passing practical work in the form of a practicum, internship and teaching practice is a major requirement at both universities. Thus, the amount of anxiety in students is immeasurable, especially during the COVID-19 pandemic. Kaputa (2021) states that one ODeL

university in Southern Africa has incorporated online assessment, using e-portfolios to replace hard copies. According to Robles and Braathen (2002), e-portfolios are created to assess students' learning. Online assessment entails checking the e-portfolios and measuring student learning. The course tutors should help students create e-portfolios by placing their best work in them. The grading is done online, and feedback is given to the student.

Emerging research on e-portfolios shows that the success thereof hinges on the nature of their implementation (Scully et al. 2018). However, success depends on the placement of appropriate antecedents. Several factors need to be in place for this to happen. Attitudes, infrastructure and collaboration are key for effective implementation. Attitudes towards the use of technology in education have been largely negative. Scully et al. (2018) cite a number of studies on students' experiences with e-portfolios. The summarised findings show that students were positive about learning e-portfolios when they knew the processes involved (Lewis 2015) or when they felt that they had presented their correct effort (Bollinger and Shepherd 2010) or had prior knowledge related to e-portfolios (Wakimoto and Lewis 2014). However, students were not satisfied with e-portfolios that focused on the narrative report only, as it benefitted those with writing competencies (Struyven et al. 2014).

Strategic focus in most developing universities has been on physical infrastructure. Peters (1983) indicated the role of technology in his definition of DE. However, technological development in education, especially in ODeL, is now responding to the disruptive nature of COVID-19 that blocks humans from meeting as a way of reducing contamination. The development of appropriate Information and Communication Technology (ICT) infrastructure to carry out the different activities, which support the use of e-portfolios, is now the focus of most universities. Infrastructure development needs funding, which, in most cases, is scarce. Thus, universities are at different stages in this area. Levels of infrastructure development differ between countries, with developing countries lagging behind in this regard, hence their focus on traditional methods of assessment. The migration to e-learning has had a negative impact on students, as most cannot access the needed gadgets to access e-LMS. Synergies with technologically-advanced universities would enable the pooling of expertise.

3.2.3 Managing E-Portfolio Online Assessment Challenges During the Period

Joyes et al. (2010) established that many processes take place during the implementation of e-portfolios. These include the gathering and selection of activities, writing the narratives, and navigating the online platforms to upload to or stream on the e-LMS. Departments need to prepare students and their lecturers for their expectations. The online activities must be operational on the e-LMS. Studies have shown that students

tend to be satisfied when informed of the course expectations (Lewis 2015). Challenges experienced with e-portfolios have mainly been technical (Modise 2021), training, time, supervision, and support when implementing the practicum (Mapuranga and Bukaliya 2014). Lack of appropriate gadgets, such as computers, affects the quality of electronic submissions. Most students in Africa can only afford basic cell phones that are not compatible with the software used in e-LMS.

Student orientation that culminates in training is essential if they are to access the materials, upload, and navigate online. Student and lecturer negative attitudes have significant effects on the uptake of technologically-based programmes. The propensity to rely on traditional forms of assessment significantly affects the training of both students and lecturers. Universities need to ensure that students are orientated and trained to use technology.

E-portfolios need time to complete. Unlike formal examinations, a student may be required to do the e-portfolio for periods ranging from up to a year (Mihail 2006). According to Mapuranga and Bukaliya (2014), students have requested more time to complete e-portfolios. Support for students during their e-portfolio reduces students' attrition rate. Students who receive technical support are likely to complete the course as compared to those who do not receive any support. Support via online tutorials, tutorial letters, and other platforms like WhatsApp and e-mails tend to motivate students to complete their e-portfolios. The provision of supervision of the e-portfolio is another form of support that helps to reassure the student that they are on course.

3.2.4 Suggestions for Improving the Management of E-Portfolio Assessments

E-portfolio use is a new phenomenon with a paucity of research (Scully et al. 2018), and the need for the assessment of the whole person makes it an ideal instrument in the current environment. Departments must fully capacitate course tutors on all the processes of e-portfolios. Thus, knowledgeable course tutors who know their requirements are in informed positions to support and supervise their students, especially those confronted with problems. In the same vein, students should understand the aims and objectives of e-portfolios. Modules must present to students all the processes involved in the implementation, construction, submission and assessment of their e-portfolios (Kaputa and Gwitimah 2013; Scully et al. 2018). Objectives and outcomes of the e-portfolio must be explicit so that students can link them to workstations. Communication of all aspects of the course motivates students, inculcating positive attitudes in them towards e-portfolios. Modise (2021) recommends that universities provide technical support to students so that they focus on doing their e-portfolio. However, course tutors need to use technology as a helper of e-portfolios rather than the focus (Scully et al. 2018).

Birgin and Baki (2007) propose giving feedback to students as part of the assessment. Such feedback enables the student to correct aspects in their e-portfolio. Providing feedback to the student reassures them that their e-portfolio is relevant and improves their teaching in their workplace.

3.3 Methodology

The research focused on ZOU and UNZA. Both institutions offer degrees in Special Needs Education through ODL. By means of a qualitative approach, Special Needs Education teachers at these universities shared their experiences during their practical work and proffered how these e-portfolios could be submitted online for assessment. A qualitative case study design was used to generate data from DS&SNE (ZOU) and IDE (UNZA). The sample consisted of 20 Special Needs Education teachers from DS&SNE. These teachers were in their final year, and they and their e-portfolios were submitted online. The latter provided their perspectives on the students' experiences. This helped the authentication of the students' data by their course tutors. The research design enabled the collection of as much information as possible from the two units (Cohen and Manion 1989). Data were collected by means of an open-ended questionnaire using Google Forms and focus group discussions (FGD) on WhatsApp platforms created by the course tutors. We sent the Google Forms link to the open-ended questionnaires by e-mail to all the participants and the course tutors and ordinary e-mails to those who had failed to access the link and submit the forms. FGDs enabled participants to clarify issues raised in the open-ended questionnaire.

The data were analysed using thematic content analysis as suggested by Miles and Huberman (as cited in Hammond and Wellington 2013). This involved reading the statements and WhatsApp transcripts, looking for patterns, which enabled us to perceive categories and themes and subthemes in line with the research questions. We adhered to Cloutier and Ravasi's (2020) recommendation that one uses tables and figures in the presentation to ensure trustworthiness in line with qualitative research.

3.4 Findings

The generated data provided demographic data and the themes. Emergent themes are illustrated in Fig. 3.2.

Both institutions assessed their students, with IDE students doing the theory of the practicum during the COVID-19 lockdown. IDE students used the Astria Learning Management System to submit their assignments. DS&SNE students could submit their e-portfolios on MyVista.

The participants were both male and female Special Needs Education teachers in their final year at both institutions. These teachers had done their practicums in their areas of expertise in the various regions, in line with the requirements of the

Fig. 3.2 Emergent themes

course regulations. The full-time course tutors from the regional campus and the national centre authenticated the generated data from individual students and FGD. The generated themes were communication on the requirements; preparation for e-portfolio submission; challenges encountered; and suggestions for improvement of the online assessment. The first and second themes fell under research question 1; the third theme fell under research question 2; and the fourth fell under research question 3. We analysed and interpreted these themes and presented and discussed them in the sections below.

3.4.1 Special Needs Education Teachers' Experiences of the Submission of E-Portfolios

Theme 1: Communication on the requirements

Communication was the most important aspect of the participants' experiences. Communication embraced every aspect they raised. However, three subthemes were prominent, namely requirements for the e-portfolio; alternatives for submission; and availability of support services.

Communication on the requirements of the course, specifically the requirements for doing and submitting the e-portfolio online, was raised by the teachers. MyVista was the main communication modality used by the course tutors. However, due to a number of challenges, most of the teachers could not access it. They resorted to other means, as stated by one teacher:

> These have been communicated through 'WhatsApp' social media; through direct phone calls with the Mash. West Coordinator; through Text Messages (SMS) and through e-Mails.

Some students physically visited the coordinators to get the requirements. Course tutors confirmed that the e-LMS platforms at ZOU were used to convey requirements in the course module and through online tutorials.

> Students have a guiding module on their eLearning platform. I also give them supplement notes and tutorials.

The second sub-theme was on the alternatives for the submission of the portfolio if they failed to upload it to the e-LMS. Some students claimed that there was no alternative, as they were required to submit online only. Most students said that they were told that they could submit the hard copy if they exhausted all methods of submitting online. Their course tutors confirmed the first claim by students:

> Students can only submit online and we have not been accepting any other way for the last two years.

Another tutor said:

> There is an alternative to using our old method of submitting hard copies. However, we encourage them to submit online at all costs. If they fail to submit online, they can arrange with IT people at the campus to assist them.

The third theme was on the availability of support services. Three support services were in place for the students: ICT laboratories and WiFi at the regional campuses; course tutors to guide them; and notes.

One course tutor confirmed:

> We as a university have put in place computer laboratories with laboratory assistance who are there to assist students who face submission challenges.

Theme 2: Preparation for e-portfolio submission

Preparation for e-portfolio submission was a major issue for the participating teachers, as it enabled them to submit their e-portfolios. Three subthemes were identified: training; needs; and focus of the practicum.

Although no training was provided specifically for e-portfolio submissions, most participants felt that the assignment training they got on MyVista was adequate to enable them to submit online. In this regard, participants said the following:

> I did not receive any training apart from following recommended guidelines from the University Practicum module

> Intended to use the same route as that of assignments. Through MyVista.

> At such a time like this. It's a bitter pill to get all the necessary information since some documents need the school head and learners; but on the side of the tutors, no problems encountered as it's our tradition to use online lectures.

Despite having no specific training for this exercise, they claimed that they had no option but to comply with the course requirements. One course tutor in the FGD narrated the following experience of students:

> Because they [students] lacked preparation for this, they at first panicked and questioned how such documents could be uploaded on MyVista. So, we had to cool their tempers and assure [them] that it was possible. At the end as those who had successfully uploaded shared their successes, the phobia vanished from the majority while a minority remained hesitant and not ready but were forced by the deadline dates to try their luck.

Course tutors at the various regional campuses used other methods to persuade the students to convert their files to e-portfolios and submit them. Some of these were:

> Encouraged them to embrace technology, since the world has gone digital

> We helped them through WhatsApp platforms

> Asked them to visit the IT lab for help

In the FGD, one participant said the following:

> Preparedness was partly disturbed by lockdowns, which made it difficult for me to meet the school staff as well as learners to work with. As a result, submission was done hurriedly in order to meet the deadline.

The students indicated what they needed to be able to complete all the e-portfolio processes. They needed:

> A working e-LMS platform and Data connectivity. Even the course tutors also needed adequate internet connectivity and a more efficient PC and laptop; data bundles, especially this time when they were working from home.

The third sub-theme was on their practicum focus areas, as shown in Table 3.1. Lecturers, by virtue of their having students' records, provided their focus areas. All DS&SNE students uploaded their e-portfolios to MyVista. Students focused on all taught aspects in order to combine theory and practice.

For example, one teacher did their practicum at the following two sites:

> Teaching the visually impaired primary school learners at Jairos Jiri Special School and Rehabilitation Work at Kadoma General Hospital – Rehabilitation Department.

Table 3.1 Practicum focus areas

Students	Course tutors
• Teaching the visually impaired • Rehabilitation • Disability centre • Resource unit	• Policy • Application of theory • Management skills • Teaching • Rehabilitation • Special needs education • Disability studies • Rehabilitation • Therapies • Disability counselling • All-inclusive development areas

The programme regulations required them to do their practicum at two sites in a year.

At IDE, the focus was different due to the COVID-19 restrictions. One course tutor summarised the students' experience as follows:

> We ended up with theory without practicing even in practical areas such as braille and sign language.

The last theme involved accrued benefits of using e-portfolios. One teacher participant mentioned the following:

> It gave me self-evaluation as l was looking at each item and seeing the strengths, weaknesses and suggestions. It requires hard work and patience, e.g. child study IEP to mention a few.

One course tutor summarised the benefits to them as course tutors:

> It's safer
>
> As the academic field embracing IT, it means moving with the trend
>
> makes marking flexible and convenient as one can access and mark the files anywhere with office space a challenge in most regions, it will reduce [sic] cramp.

3.4.2 Managing E-Portfolio Online Assessment: Challenges During the Period

Theme 3: Challenges

Students from both institutions faced incapacitating challenges. IDE used alternative ways of assessment. IDE students could not do their practicals, as pointed out by the course tutor:

> Practicals are physically done and validated. We had challenges during COVID-19. Students couldn't do their practicals owing to quarantining state of affairs.

IDE offers its Special Needs Education degree in the manner explained by the course tutor:

> [Its] blended online and face-to-face Assignments are given via the learning management system.

This may have affected their provision, as students failed to use the traditional practical work procedures.

DS&SNE students experienced challenges as they tried to do their practicums and submit them online. However, their challenges were more on the processes involved in the construction of the e-portfolio, its submission, and feedback. Table 3.2 summarises the challenges.

One Special Needs Education teacher from the capital city of Harare summarised it all as follows:

Table 3.2 Challenges faced by students and course tutors

Students	Course tutors
• No data provision—financial • No laptops • No training • Training manual is needed • No feedback • Poor network • Power cuts • Could rarely get required instructions • Submitting my practicum online • Attachment of hard copies • Difficult to sieve information required	• Network challenges and lack of data • Technophobia (students & tutors) • e-LMS efficiency • District centres not IT connected • Students had no e-mails addresses

> For me submitting my practicum online was a bit challenging in the sense that l did not know exactly how to go about it except that l had to follow the pamphlets on my vista because the practicum had to be submitted. Attachment of hard copies, l did not know if l had to take pictures of the hard copies and had no one to ask about it. However, l did what l had to and submitted the practicum.

> The only feedback l got was my final mark on my result slip. So l do not really know how l performed as in the strengths and weaknesses on my completed practicum.

The course tutor confirmed this

> Students lack compatible devices; they experience data challenges and, most significantly, network challenges. In addition, students experience high costs when they are scanning some practicum documents and evidence as attachments to the narrative report.

Students showed partial satisfaction with the whole process, as they said they were prepared to submit their e-portfolios online for assessment despite the challenges they had experienced.

3.4.3 Suggestions for Improving the Management of E-Portfolio Assessments

Theme 4: Suggestions for improvement of online assessment

Both institutions recommend online submission and assessment of e-portfolios as the best method. One course tutor (IDE) stated:

> E-Portfolio is the way to go

A DS&SNE course tutor affirmed this statement:

Table 3.3 Suggestions for improvement

Students	Course tutors
• Training • Laptops • Need online tutorials • Improve communication • Post some literature online • Opening the portal • By creating room for hand delivery • Have e-mails	• Communicate calendars early • Students need training • Inaccessibility of MyVista • Continuous student support • Teaching students e-portfolios online • Visit the IT lab for help • Encourage them to embrace technology • System should be self-correcting • Revise and align the computer module

> It's time to align ourselves to this 4th computer compliance industrial revolution. The 5.0 heritage-based education demands that, especially in this COVID-19 period where social distance is demanded. I pointed out that the demands of the university to submit practicum online are a plus on your part as they are equipping you and our students with skills to remain relevant or to keep your heads above water in this new normal

The suggestions in Table 3.3 summarise the recommendations from both institutions.

Course tutors must seriously embrace students' submissions, as pointed out by one student:

> I think there is a need for proper communication between the faculty and students. That is why we provided our phone numbers and email addresses because l only discovered that there was a deadline but as a student l did not know what needed to be done and therefore there is a need for adequate training on how to layout and submit a practicum online.

Students highlighted the need for training and online tutorials:

> I suggest the importance of training be conducted by Universities highlighting the exact practicum materials to be sent online

> More training is needed on how these practicums should be carried out. Yes, the module does help but there is a need for tutorials.

> Prepare them, give them supporting notes that they use for trials, and always have user-friendly fast internet. The system [MyVista] should be self-correcting whenever one faces challenges and interactive too.

3.5 Discussion

The purpose of the research was to find out how Special Needs Education degree students were managing the transition to the use of e-portfolios brought about by the "new normal". COVID-19 disrupted the provision of physical teaching and learning

activities, including assessment. Practical subjects, like the Special Needs Education practicum, were not spared. Therefore, the study aimed to find solutions through the examination of student experiences. Responses depicting student experiences and lecturers' authentication provided answers to all the posed questions. E-portfolios were not equivalent to hardcopy portfolios, as required by the Equivalency theory of Simonson et al. (1999) due to the COVID-19 pandemic. Both institutions aligned with the MMOE theory by Picciano (2017). The discussion focuses on their responses in the areas in which they participated.

Communication on the requirements of the e-portfolio dominated the students' responses. Communication permeated all the students' experiences, as it is the vehicle used to prepare them. Scully et al.'s (2018) findings from the analysis of wide-ranging studies resonate with our findings. The similarity is in the aspects which needed to be communicated to students. The finding as regards the preparation of the e-portfolio is in agreement with that of Wakimoto and Lewis (2014). Students could do activities that were similar to what they had experienced before. For example, experiences of uploading assignments to the e-LMS equipped students with the necessary skills to upload their e-portfolios. Students knew their focus areas and proceeded to construct their e-portfolios. Alternative methods of informing them enabled the completion of their e-portfolios.

There were significant technical challenges in the implementation of the e-portfolio. Our findings show a focus on the technical aspects of e-portfolios, unlike Birgin and Baki (2007) and Scully et al. (2018) who found that the focus was on the content and implementation of e-portfolios. This affirms Modise's (2021) recommendation that universities must improve the technical aspects of e-portfolios. Students should not expose themselves to COVID-19 by visiting their course coordinators and regional campuses in contradiction to government health restrictions that safeguard them from mortality.

Students made numerous suggestions for improvement: student preparation through training; module revision to include e-portfolios; making MyVista user-friendly; and improving internet connectivity so as to ensure that the e-portfolio is compiled and submitted seamlessly. Both institutions highlighted the need for training and enabling facilities. The partnership between the two institutions should enable them to share experiences regarding how they improve e-portfolio implementation, compilation and submission. In a study conducted by Kaputa (2021) of three institutions in the Southern African Development Community (SADC), he mentions an ODeL institution that is using e-portfolio assessment as an alternative to traditional paper-and-pencil examinations. Institutions need to collaborate to address the technical impediments so that students submit quality e-portfolios.

3.6 Conclusion and Recommendations

3.6.1 Conclusion

The students answered the main research question by expressing their experiences with e-portfolios. They shared varied experiences from both institutions. Both institutions assessed their students' practicum in response to the conditions that were prevailing in their countries. DS&SNE students participated in their practicum, created e-portfolios and submitted these to MyVista. However, they were partially satisfied with the preparations. IDE students were unable to submit e-portfolios due to COVID-19 quarantine in their countries; therefore, they were examined on the theory of the course submitted via the Astria LMS platform. ZOU students benefited from their experiences with the MyVista platform. They had no choice but take use e-portfolios despite the numerous challenges they had experienced. E-portfolio management involved the use of alternative electronic modes.

3.6.2 Recommendations

- The students recommended thorough training in e-portfolio management and highlighted implementation as paramount.
- The departments need to be explicit as to what should be done in the whole e-portfolio process.
- There is a need to upgrade the technical aspects for both students and lecturers.
- Further research must focus on the actual implementation of e-portfolios in the "new normal".

Acknowledgements Zimbabwe Open University and the University of Zambia for giving us the Authority to carry out the research in the Department of Disability Studies and Special Needs Education and the Institute of Distance Education.

References

Arter JA, Spandel V (1992) Using portfolios of student work in instruction and assessment. EM: IP 11(1):36–44

Barrett H (2007) Researching electronic portfolios and learner engagement: the REFLECT initiative. J Adolesc Adult Lit 50(6):436–449

Barton C, Collins A (1997) Portfolio assessment: a handbook for educators. Dale Seymour Publications, New York

Birgin O, Baki A (2007) The use of portfolio to assess student's performance. J. Turk. Sci. Educ. 4(2):75–87

Bollinger DU, Shepherd CE (2010) Student perceptions of eportfolio integration in online courses. Distance Educ 31(3). https://doi.org/10.1080/01587919.513955
Chick N (2013) Metacognition. Vanderbilt University Center for Teaching. https://cft.vanderbilt.edu/guiges-sub-pages/metacognition/. Accessed 18 Oct 2021
Cloutier C, Ravasi D (2020) Using tables to enhance trustworthiness in qualitative research. Strateg Organ 19(1):113–133. https://doi.org/10.1177/1476127020979329
Collins A (1992) Portfolios in science education: issue in purpose, structure and authenticity. Sci Educ 76(4):451–463
Cohen L, Manion L (1989) Research methods in education, 3rd edn. Routledge, London
Hammond M, Wellington J (2013) Research methods: the key concepts. Routledge, London
Hamweete W (2012) Quality assurance in modules at the institute of distance education, the University of Zambia. https://www.ajol.info>huria>article>viewPDF. Accessed 18 Sep 2021
Joyes G, Gray L, Hartnell-Young E (2010) Effective practice with e-Portfolios: how can the UK experience inform implementation? Australas J Educ Technol 26(1):15–27
Lewis L (2015) A critical reflection on eportfolio as a teaching tool. New Z J Teach Work 12(2):115–130
Kaputa TM (2021) Embracing online assessment in open distance learning in Zimbabwe. ZJDE 1(1):9–17
Kaputa TM, Gwitimah AR (2013) SPED403. Practicum. Zimbabwe Open University, Harare
Khan MA (2021) COVID-19's impact on higher education: a rapid review of early reactive literature. Educ Sci 11:421. https://doi.org/10.3390/educsci11080421
Mapuranga B, Bukaliya R (2014) Organisation and management of practicum at the Zimbabwe Open University: issues of programme effectiveness, benefits and challenges. Int J Hum Soc Sci Educ 1(2):48–56
Mihail DM (2006) Internship at Greek Universities: an exploratory study. J Workplace Learn 18:28–41
Modise MP (2021) Postgraduate students' perception of the use of e-Portfolios as a teaching tool to support learning in an open and distance education institution. JL4D 8(2):283–297
Muleya G, Simui F, Mundende K, Kakan F, Mwewa G, Namangala B (2019) Exploring learning cultures of digital immigrants in technologically mediated postgraduate distance learning mode at the University of Zambia. Zambia Inf Commun Technol (ICT) J 3(3):1–10
Mwanangombe C, Mundende K, Muzata KK, Muleya G, Kanyamuna V, Simui F (2020) Peeping into the pot of contraceptives utilization among adolescents within a conservative culture Zambia. Am Educ Res J 8(8):513–523
Paulson FL, Paulson PR, Meyer CA (1991) What makes a portfolio? Educ Leadersh 48:60–63
Peters O (1983) Distance teaching and industrial production: a comparative interpretation in outline. In: Sewart D, Keegan D, Holmberg B (eds) Distance education: international perspectives. Routledge, New York, pp 95–113
Picciano AG (2017) Theories and frameworks for online education: seeking an integrated model. Online Learn 21(3):166–190. https://doi.org/10.24059/olj.v21i3.1225
Robles M, Braathen S (2002) Online assessment techniques. The Delta Pi Epsil J 44(I):39–49
Scully D, O'Leary M, Brown M (2018) The learning portfolio in higher education: a game of snakes and ladders. Dublin City University, Centre for Assessment Research, Policy & Practice in Education (CARPE) and National Institute for Digital Learning (NIDL), Dublin
Simonson M, Schlosser C, Hanson D (1999) Theory and distance education: a new discussion. Am J Distance Educ 13(1)
Simui F, Kasonde-Ngandu S, Cheyeka AM et al (2018) Unearthing dilemmas in thesis titles: lived experience of a novice researcher in Sub-Saharan Africa. Int J Multidiscip Res Dev 5(4):99–105
Struyven K, Blieck Y, DeRoeck V (2014) The electronic portfolio as a tool to develop and assess pre-service student teaching competences: challenges for quality. Stud Educ Evaluat 43:40–54
Syafei M, Mujiyanto, J Yuliasri I, Pratama H (2021) Students' perception of the application of portfolio assessment during the COVID-19 pandemic. https://doi.org/10.18502/kss.v5i7.9320

Wakimoto DK, Lewis RE (2014) Graduate student perceptions of eportfolios: uses for reflection, development and assessment. Internet High Educ 21:53–58
Winsor P, Ellefson B (1995) Professional portfolios in teacher education: an exploration of their value and potential. Teach Educ 31(1):68–91

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