

Online learning experiences of learners with special education needs in Institutes of Higher Education

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Abstract

This study was focused on assessing the online learning experiences for learners with special education needs in Institutes of Higher Education. The study was motivated by the effect of the adoption of online learning by Institutes of Higher Education during the COVID-19 pandemic. Student disabilities ranges from hearing impairment, visual impairment, and low concentration span. In Institutes of Higher Education there is unplanned inclusive education hence need to understand the experiences of these learners. The objectives of the study were to assess the perceived ease of use of Google classroom by learners, the perceived usefulness of Google classroom, the perceived usefulness of screen casts and the perceived ease of online assessments by students. An exploratory research design was adopted for the study and a case study of one tertiary institution in Zimbabwe was considered for analysis. Key informant sampling technique was adopted in selecting lecturers for the study. These were the key informants since the lecturers are members of the faculty disability committee. Snowball random sampling technique was adopted for selecting students. A sample size of 4 lecturers and 50 students was used. The data was collected using focus group with the students and interviews were conducted with lecturers. The findings were that most lecturers were not aware that they had learners with special education needs in their classes. It was also found out that Google classroom was seen as a very useful and easy to use platform for online learning. It was also noted that screencasts and online assessments were very effective for online learning. Students also highlighted that they had data and gadgets challenging for online learning. An area for further study suggested was on inclusive education and attainment of Education 5.0 in institutions of Higher learning in Zimbabwe.

Keywords: Special needs; online learning; google classroom; screencasting

1. Background to the study

Covid-19 pandemic has made it mandatory for tertiary institutions to adopt blended teaching due to lockdowns and restricted movements and social gatherings. Ali (2020) asserts that universities worldwide are moving more and more towards online learning or e-learning. In blended learning, students receive at least part of their education program online but also have in person classroom time with teachers and classmates (Tindle et al 2016). Many countries started to offer online teaching to students by Google classroom, Zoom, Skype, Moodle, screen casts among others in order to promote online education and restore the normal teaching order (Chen et al 2020). The use of these online platforms made it bearable to continue teaching and the interaction between teachers and students. However, learning using these online platforms was, and still is, a challenge for both and especially for learners with special education needs.

Students with disabilities may need special education support to access and process content to maximize their learning and allow them to reach their potential. Some virtual schools do not use the term “special education” or “disability.” Instead, they use terms such as “personalized learning” or “student services” for all virtual students, meaning that learning is tailored to each student’s preferences and needs (Tindle et al 2016). Regardless of what words are used, it is important institutions with students with disabilities to understand how virtual learning will meet the needs of these learners and their level of engagement in supporting the students’ learning.

In the United States of America, the education sector experienced a rapid growth in the field of innovation in terms of technologies which included e-learning platforms, applications and other effective online tools. These provided them with the chance of learning face to face with students on the online environment. Deslonde and Beccerra (2018) demonstrated that new online technologies were very effective educational tools which ease the means of doing work for lecturers. The National Centre for Education (2017) reports, that between the years 2013 and 2014 the schools in United States of America spent about \$634 million integrating technology to support the achievement of education sector. The large part of the cost was on buying the necessary equipment, training of personnel. However, despite the huge financial budget lack of technology acceptance is a barrier to the success of integrating new technologies. The value of technology diminishes if there is no user acceptance from the society (Barton and Dawson 2016).

Most of the studies conducted in Zimbabwe focused on inclusive education in primary and secondary education level. A study by Mkandla and Mataruse (2000) highlighted that Zimbabwean schools use up to four curriculum and instruction options to support school participation by students with disabilities: locational inclusion, inclusion with partial withdrawal from ordinary classroom settings, inclusion with clinical remedial instruction, and unplanned or de facto inclusion. In Zimbabwe, there are significant differences in the quality of inclusive education between urban and rural areas. Urban centers tend to have better developed education infrastructure and are likely to have planned for inclusive education (Mutepfa et al 2007). In the context of tertiary education inclusive education is unplanned or de facto for learners with moderate to mild special education needs. Hence these learners are exposed to the same teaching tools for online environment as those learners without special education needs.

1.2 Statement of the Problem

The Covid 19 pandemic has forced institutions to change the way they have been operating forcing them to adopt online teaching. In state universities there are diverse learners with different

capabilities, and this has an influence on how the institutions will tailor-make their online teaching methods so that they also meet the requirements of students with special education needs. Most of the research done on inclusive education were mainly focusing on primary education and little has been done on learners with special education needs in tertiary institution. This requirement for open access to education does not extend to tertiary, perhaps because the government considers literacy as achievable by Grade 7 while high school as well as tertiary education a privilege, rather than a right (Mutepe et al 2007). It is against this background that this research is aimed at analyzing the online teaching and learning experiences for learners with special needs in tertiary education institutions.

1.4 Research Objectives

- To determine the perceived ease of use of Google classroom by learners with special education needs.
- To ascertain the perceived usefulness of screen casts (pre-recorded videos) to learners with special education needs.
- To assess the perceived ease of use of online assessments by learners with special education needs.

2.Literature review

The study was guided by Technology Acceptance Model by Fred Davis (1985). Davis and his team believed that for an innovation to be adopted there were factors that were considered to be important. According to the model the adoption of new technology is influenced by the perceived usefulness of the innovation and the perceived ease of use by those who are meant to benefit from the innovation. Based Davis (1985), the most proximal antecedent to use any technology is the behavioral intention to use it and this can be termed acceptance of the technology or end user satisfaction. Behavioral Intention (BI) is influenced by one's attitude toward using the technology (ATT). Attitude, in turn, has two determinants: perceived usefulness (PU) and perceived ease of use (PEOU). According to Davis (1985) perceived usefulness is defined as the degree to which an individual believes that using a particular system would enhance his or her job performance. Davis(1985) went further on to define perceived ease of use as the degree to which an individual believes that using a particular system will be free of physical and mental effort. Perceived ease of use is hypothesized to have a significant direct effect on perceived usefulness since all being equal a system which is easier to use will result in increased job performance (greater usefulness) for the user. In this case the adoption of online teaching and learning must be beneficial to both the learners and the lecturers.

The main aspect of this model is based on perception of potential users. The developer of any innovation may think that it will be accepted by the potential users, but the users may reject the innovation unless they also believe on the usefulness of the innovation. According to Davis, the the perceived usefulness of an innovation is not on the innovation itself but it's determined by the users of the innovation. On the other hand, Parassuraman (2000) developed the Technology Readiness Index which asserts that a new innovation can only be accepted if the users are ready to adopt it. The TRI focuses on the personalities of the target users of any innovation introduced.

2.2.1 Learners with special education needs (SEN)

These learners call for inclusive education in tertiary institutions. Inclusive education is a way of thinking about how teachers can teach and/or design their lessons in different ways so that all

students can participate and be involved. Inclusive education means different and diverse students learning side by side in the same classroom (The open society, 2015). Inclusion is a way of thinking and acting that demonstrates universal acceptance of and belonging for all children and students (Alberta Education, 2016). Inclusive education means encouraging each child to take part in everyday activity of the school and helping every child to achieve the most from school. Inclusive education means ensuring that the system adjusts to meet children's needs, rather than expecting children to 'fit' into the system (National Council for Special Education, 2014). Inclusive education should consider learner diversity and be flexible enough to meet the needs of each learner. Inclusion is an attitude and approach that embraces diversity and learner differences and promotes equal opportunities for all learners (Alberta Education, 2016).

Inclusive education values diversity and the unique contributions each student brings to the classroom (The open society, 2015). Students without disability also benefit when they are in an inclusive class with students with disability. This is because according to McManis (2017) as lecturers take into greater consideration their diverse students with disability learners, they provide instruction in a wider range of learning modalities (visual, auditory, and kinesthetic), which benefits their regular education students as well. Lecturers in inclusive classrooms should do more to ensure that the students actively participate in the classroom, are learning appropriate material and have opportunities to be involved with other students. The universities and colleges of higher learning do not have lecturers with knowledge in instructional methods for students with disabilities (Kochung, 2011). This creates a limitation in the achievement of inclusive education in higher institutions.

2.2 Google classroom as an online teaching and learning platform

Google is a Web 2.0 tool that offers very important, tools facilities and applications that can be used for varied uses including learning. The Google platform for teaching and learning has its unique built-in functions that can be used for pedagogical, andragogical social and technological affordances (Shaharanee 2016). The Google Classroom was introduced as a new tool in Google Apps for use in Education in 2014. This classroom enables lecturers to create and organize assignments quickly, provide feedback efficiently, and communicate with their classes with ease. Google classroom enables lecturers to work together with their students face to face on the online environment. The lecturers can assess students on the online environment and give them feedback as required. Google classroom can be used in conjunction with other platforms like videos, presentations and (Hussainni 2020).

Saade et al (2007) asserts that on the context of integration of Google classroom into the teaching and learning at tertiary institutions, the users (teachers or students) must have perceptions that Google classroom is useful in helping in the teaching and learning process, as its ease of use they will intend to use it when needs arise. Google classroom can be elevated to become a pedagogical/cognitive tool to help in changing the focus of the classroom from one that is teacher-centered and controlled to one that is learner-centered and open to inquiry, dialogue, and creative thinking on the part of learners as active participants. The teachers' uphill tasks are to make students aware of its use in future workplace, as well as to ensure students confidence that it is easy to use. Google classroom can be elevated. It is evident that Google classroom plays a pivotal role as an online platform that is interactive promoting adult learning.

The major benefits of Google classroom as a learning tool according to Hussainni et al (2020) include that it enables teachers to create material and upload it on the platform, create assignments,

communicate with their students and set submission date for the assignments created. It also allows lecturers to create group work for the students in the classroom and assign each group a different task to be completed. It allows learning and interaction to be very interesting. Through using Google classroom lecturers can identify students that miss assignments due dates and those who would have submitted their work late. It was further argued that Google classroom was very beneficial to both the learner and the lecturer because the lecturer can easily extend due dates and update or review student's grades. The materials previously posted by the lecturer can be reused later by both the student and the lecturer at a later date.

2.3 Screen cast as an online teaching tool

As methods of learning and teaching are changing, due to advances in technology, it is useful to evaluate the impact and opportunity that technology enhanced methods can have on students' participation in the online environment. Hurford and Read (2011:31) defined screen casting as 'Screen recording software that turns screen output into a video to teach an application or to promote a product by demonstrating features. Users can also make videos of screen sequences to log results for troubleshooting. Screencast programs may allow narration during capture, and advanced versions allow editing and annotation after the capture'. A screencast is a video recording of a computer screen describing the on-screen actions, commonly accompanied with audio narration and visual annotations. Once produced, the video can be shared with students via Google classroom. Educational screencasts are a popular method to enable the inclusion of video-based instruction, primarily used as a tool to deliver; pre-recorded lectures/presentations, demonstrations or tutorials, annotations and personalised feedback often used to support blended and online learning.

Screen casts are very useful for online teaching because they can be used to facilitate student-centered learning; allowing students flexibility to view recordings at their own pace, time and location of choice. They can also be used to facilitate students utilising recordings for catchup, revision purposes or for international students to revisit/replay. Student needs to be technologically savvy to use technology tools that may be required. Students of the digital age appear to be independent, more technology disciplined, and technology savvy, well suited for online environment. Online learning at your own pace is beneficial for a high-quality college degree (Adebo 2018).

The combination of sound and images within a screencast enhances online learners' experiences compared to the more traditional text format and can be a powerful method of communicating content in an online setting. There are definite benefits and advantages in using a screencast for instructional purposes. In their respective learning environments (e.g., home, office, coffee shop, etc.), learners can view a particular screencast at their own convenience and multiple times, if desired. By using a screencast, learners can see how to complete a particular procedure (e.g., how to insert a table in a word-processing file) and can observe what the actual screen looks like in completing the specific operation (Peterson, 2007)

2.4 Online assessment

Assessment is the ongoing process of gathering, analysing and reflecting on evidence to make informed and consistent judgments to plan for and improve future learning and development (DEECD, 2008). Students, teachers and peers are constantly involved in formal and informal

assessment activities. Online assessments enable students to self-regulate and monitor their own learning, which is recognised as a means of prompting deeper and more effective learning.

Effective assessment requires clarity of purpose, goals, standards and criteria, achieved through alignment with an engaging and challenging curriculum. Effective pedagogy requires knowledge of where each learner is up to in their learning and development to enable decisions about the best way forward to promote further learning and development (Masters, 2010). Teachers and school leaders now have a greater range of formats for effective assessment of skills and knowledge. They can use the data held in digital learning platforms to better diagnose and monitor individual students' progress and achievements and to identify patterns across groups. Teachers use assessment information, including feedback on the effectiveness of their own practice, to determine both the learning needs of their students and their own professional development (DEECD, 2011a). Rather than just being the end point, assessment is the beginning of a cycle of diagnosis and planning to answer key questions such as: What do my students already know? What sources of evidence have been used? What do they need to learn and do?

Computer-based and online testing can provide timely feedback, either from the computer itself or from lecturers. Tests available on-demand allow lecturers and learners the flexibility to take them when it's appropriate for them. Having these assessments available anytime or anywhere often means that learners can assess their own preparedness, retake assessments as necessary, and use the results to help them with their studies. Using online assessment tools can help lecturers save time since most types of test questions are automatically marked and student results can be viewed through different types of reports. In addition, students benefit from getting immediate results and feedback, which can then be used to support, encourage, and motivate their learning.

3. Research methodology

The study will adopt a qualitative approach to research. Qualitative research involves collection and analysis of non-numeric data to understand concepts, opinions, or experiences. It can be used to gather in depth insights into a problem or generate new ideas for research (Saunders 2011). Explorative research design was adopted for this study and new information on the impact of various online learning affected students with special needs was explored for the first time. The qualitative sampling techniques used for the study were Key informant method and Snowball sampling technique. Snowball is a nonprobability sampling technique most ideal for analyzing vulnerable study participants. It was used in selecting students for the information required for the study. It is a purposeful sampling technique that allows one research participant to identify other participants (Crisswell 2012). It is a cost effective and quicker way of carrying out research. Learners with special education needs were able to assist the researcher in identifying each other. Respondents are selected until saturation level is attained: this is whereby you are no longer getting any new information or responses from the respondents.

The other sampling technique method used in the study was the key informant method. This is whereby people with expertise or information about the area of study are consulted during the research. This approach was used in selecting lecturers to respond to the study. The lecturers chosen are members of the Disabilities committee in the faculty. This means they have adequate information about the nature of disabilities in the faculty as well as the entire university.

3.1 Target population and sample size

The target population were undergraduate students and lecturers in the Faculty of Business Sciences Department of Information and Marketing Sciences. There are 28 lecturers in the department and around 500 students from conventional and visiting class. A good sample size is usually around 10% of the population as long as this does not exceed 1000 (Saunders 2011). In this case the sample size consisted of 4 lecturers and 50 students giving a total sample size of 54. Shetty (2022) argued that a sample should just be enough to sufficiently describe the research question at hand but at the same time not too big to avoid repetition of data through the attainment of saturation. For the study, the researcher therefore used a sample size of 54 respondents in fear of data saturation and the diminishing returns with larger samples that leads to more data and not necessarily more information

3.2 Data collection Instruments

The data was collected as firsthand data specifically for this research to solve the research problem. Since the study is qualitative in nature, the researcher used focus group discussions as well as interviews. The focus group discussion was done with students while online interviews were administered to lecturers through WhatsApp platforms. Calder (1977) asserts that a focus group is a good tool to use because a focus group requires a relatively small portion of time from a much smaller number of people than is the case with many other social science methods. For this study, focus group was chosen for data collection because it helps stimulate new ideas and concepts for both the researcher and the participants. Like any other data collection tools, the major limitation of focus groups discussion is that it requires self-disclosure of information by participants, but the views and values of participants may render certain topics off limits. The interviews provide room for more clarification and further probing to answer to the why part of the research (Ramshaw, 2020). An interview is defined as a conversation between both the interviewer and interviewee. For this research the researcher conducted interviews with lecturers from the department. The interviews were conducted using mobile phones.

3.3 Ethical Considerations

The data gathered by the researcher was strictly used for this research project only. All the information that was supplied to the researcher remained confidential and was used only for the purpose of this study. The researcher notified the respondents on the purpose of the study and also that participation was voluntary, and they can withdraw from participation anytime.

3.4 Data Analysis and Presentation Tools

The research is a purely qualitative one hence data presentation and analysis was done using Thematic analysis. Braune and Clarke (2012) defined Thematic analysis as a method for systematically identifying, organizing, and offering insight into, patterns of meaning (themes) across a data set. Thematic analysis allows the researcher to make sense of collective or shared meanings and experiences. Thematic Analysis used for data presentation for this study adopted both inductive and deductive approaches. An Inductive approach to data coding and analysis is a 'bottom-up' approach and is driven by what is in the data (Braune & Clarke 2012). This means that the codes and themes are derived from the data content so what is mapped by the researcher during analysis closely matches the content of the data. On the other hand, a Deductive approach to data coding and analysis is a 'top-down' where the researcher brings to the data a series of concepts, ideas, or topics that they use to code and interpret the data.

4. Discussion of research findings

Table 4.1 Response rate according to research instrument

Data collection method	respondents	Target response	Actual response	% response rate
Focus groups	students	4 sessions	3 sessions	75%
Interviews	lecturers	2 sessions	2 sessions	100%
Total		6	5	83%

Source: Primary data 2022

As illustrated on the table above, the researcher had planned to hold four focus group sessions with students from the Marketing department. However, due to factors beyond control, only two sessions were held giving a response rate of 75%. Two interview sessions were planned and administered to lecturers from the department giving a response rate of 100%. The total response rate for both the instruments was 83% and this concurs with Richardson (2016) who states that for a desirable research investigation the response rate should be at least 70%. Forty students participated in the focus group discussion which were conducted. This figure was ideal for the focus discussion and representative enough for the target population of the students in the department of Marketing undergraduate class which was used as a case study to represent the whole institution. This concurs to Boddy (2016) who states that in qualitative research, a sample size of more than 20 people yields correct information without any saturation.

Table 4.2 Focus Group Respondents Demographics

Number of participants	Gender	Class	Online learning method used		
			Google classroom	Screen cast	Online assessment
5	Females	1.2	yes	Yes	Yes
5	Males	1.2	yes	Yes	Yes
10	Females	2.1	yes	Yes	Yes
10	Males	2.1	yes	Yes	Yes
5	Female	4.1	yes	Yes	Yes
5	Males	4.1	yes	Yes	Yes

Source: Primary Data (2022)

Findings from the focus group discussion indicate that all the students have been exposed to online learning platforms for their lectures. These findings are generalized for the entire institutions since the focus group participants were used as a case study for the institution.

Table 4.3 Interview Respondents Demographic Profiles

Respondent	Gender	Online teaching method used		
		Google classroom	Screen cast	Online assessment
A	F	Yes	Yes	Yes
B	F	Yes	Yes	Yes
C	M	Yes	Yes	Yes

B	F	Yes	Yes	Yes
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Source: Primary Data 2022

Findings from the interview indicated that lectures used the stated online teaching platforms for conducting their lectures. There were also other platforms like emails and whatsapp that were also indicated to be used by the different lecturers in conducting lectures with their students. However, these ones were not of interest to the researcher since the study was mainly delimited to Google classroom, screencasts and online assessments.

4.2 Focus Group Discussion Findings

This section contains responses on the three focus group discussions conducted with the students. The three groups were according to the study level of the students, that is level 1.2, 2.1 and level 4.1. This made it easier for the researcher to conduct the discussion with the participants. The sessions were conducted on different times and their responses were recorded.

4.2.1 Theme one: online learning experiences through google classroom

When asked about online learning, all the participants in level 4.1 and level 2.1 stated that they were familiar with it and they indicated that they started using the platforms soon after the first lockdown in 2020 when the Covid pandemic hit the country. The level in 1.2 also stated they when they first enrolled with the institution they were introduced to online learning during their orientation program. All the participants in the focus groups stated that they were only aware of Google classroom as the main online platform being used by Midlands State University to deliver online lectures.

The participants were asked on the perceived usefulness of Google classroom for online learning. Most participants from all the group participants indicated that it was very useful since it enabled them to attend classes even if they are in different areas. The findings indicated that all the participants viewed Google classroom as a useful platform for online learning. Most participants in the focus groups highlighted the following:

'Google classroom is very useful because it helps us to attend classes online even if we are in different areas. However the major problem with online learning is availability of data and the gadgets to access the classes. There is also the issues to do with internet connectivity since some of us stay in remote areas with limited internet access'.

The findings show that Google classroom is a useful online platform for use by the students. The above findings concur with the findings by Hussaini et al (2020) who found that Google classroom is effective in improving students' access and attentiveness towards learning. Deducing from the above statement it is clear that most students have connectivity issues for accessing Google classroom. This means that even if it is a good and useful platform the learners had difficulties in accessing it. This concurs with Periani and Suputra (2021) who carried out a research on students perception of online learning and found out that students have complaints of failing to join the classes because they do not have cellular data which means they cannot access the classes.

The researcher went on to ask the students if they had any special need education which requires them to be given special treatment. This question focused on moderate to mild disabilities such as hearing impairments, visual impairments, and low concentration span. From the findings it shows that most of the student were not free to open to their peers and lecturers on their disabilities. They

highlighted that they feared stigmatization from their peers. This is supported by Karen (2009) who argued that several learners with special education needs in developing countries suffered neglect, stigma and discrimination. In response to the question whether they have any disabilities that affected their interaction with Google classroom as a learning tool, one student responded:

‘It is not easy to disclose your condition to others especially if it is not visible. When attending lecturers in the conventional classroom, you just position yourself in the front row closer to the lecturer such that you can easily hear what is being said and you can see on the board what the lecturer is writing’. Then with Google classroom you have to find someone to assist you in zooming as well as increasing volume so that you can hear what is being explained, yet we have challenges with the gadgets themselves’.

From the above response the students do have special education needs but they are not prepared to disclose. This is supported by Karen (2009) who found out that there is growing evidence that students with disabilities learn better when they are allowed to join their peers in the mainstream education. It is also evident that in mainstream classes we do have learners with special requirements which are sometimes mild to moderate. Then on using gadgets for accessing online classes, they need to be trained on how to use certain Google extensions found on Google Play.

During the focus groups discussions, the researcher asked the participants on their perceived ease of use of Google classroom as a learning platform. The question wanted them to state how easy it was for the students to use Google classroom. The response was:

‘Google classroom as an online learning platform is very easy to use. As students we were oriented on how to join the classes as well as how to use it during the lectures. Overallly we can say that it is one of the easiest online learning platforms’. However sometimes we fail to fully utilize all the features of Google classroom because we will be busy following what the lecturer is saying, our main focus is on the teacher unlike in the conventional classroom we there is peer to peer interaction

The findings proved that it was easy for the students to use Google classroom since they have been oriented on how to use the platform when they enrolled with the institution. However it seems the students lacked peer to peer interaction during the Google classroom sessions as opposed to the conventional classroom. In the conventional classroom students can assist each other while the lecturer is facilitating the lecture. This is supported by findings from Periani and Suputra (2021) who said that the students complained that Google classroom interactions are limited to student and lecturer, they cannot interact as students since they are not familiar with the additional applications.

Theme two: online learning experiences through prerecorded lectures

The focus group went on further to discuss on the perceived usefulness of prerecorded lectures or screen casts as online learning platforms. They were asked if their lecturers uploaded pre-recorded lectures on the classrooms prior to the Google class. The researcher went further to ask the participants how easy it was for them to access the pre-recorded lectures and how effective was the use of pre-recorded lectures in learning. The respondents stated that:

‘In most cases our lecturers upload pre-recorded lectures on Google classroom. We find this very useful and helpful because it gives us the opportunity to view the material before attending the Google classroom session. When you attend the lecture you will be aware of what the lecture is

all about. Again sometimes if you have network or data challenges you will not be worried much because you will be having the material already. Sometimes you can even decide not to attend the lecture because you will be in passion of the material to be covered in the lecture’.

The above response highlights that the students appreciate the use of pre-recorded lectures. This shows that screen casts are very useful online tools for students. This is supported by Adebo (2018) who asserts that’s screen casts are an effective online tool that supports students learning. the students stated that they can view the material or listen to the audios at their own pace, this means that screen casts promotes revision by the students because they can continue to learn even before or after the Google classroom session. This is concurs with Ali et al (2011) who carried out a research to investigate the effects of screencast with narration and without narration in enhancing learning performance. The results indicate that screencast with narration was significantly more effective than screencast without narration in enhancing students’ learning performance. Peterson (2007) also asserts that screen casts can be used to supplement teaching materials in distance learning.

Theme three: online assessment experiences

The focus group discussion also focused on the perceived ease of use of online assessments. This focused on asking the participants about the different online assessments methods that they have been exposed to. There are a number of online assessment methods that can be used on the online platforms so the researcher wanted the participants to indicate them. The response from the discussion stated that:

‘We usually submit assignments on Google classroom. Some lecturers allow us to submit the assignments using emails if we are yet registered. In class tests are also done online using quizzes and Google docs’.

The findings show that the students are familiar with the use of online assessments. This is because the online assessments are very important and effective in teaching students in the online environment. This concurs with Morero et al (2011) who conducted a research in Spain on use of online quizzes as a teaching and assessment tool in the general program of the subject. The findings of the study were that using online quizzes shows that such quizzes have a proven positive influence on students' academic performance.

The study participants were also asked to identify which of the identified online assessment tools were user friendly especially for those who had special education needs. The response obtained was:

‘All these online assessment tools requires us to have internet access, why cant be we allowed to be assessed using the whatsapp platforms which are handy and always at our disposal. For example when being interviewed defending dissertations, whatsapp is very hand’.

From the above response it is clear that the students have internet access challenges and hence they need to use assessment tools that are handy and affordable to them. These sentiments are evident in their answers that they provided in their responses.

4.3 Interview findings

The target group for the interviews were the lecturers from the department of Marketing Management. From their responses it was noted that most of the lecturers did not consider the

needs for learners with special education needs when conducting their Google classroom sessions. Most of the lecturers indicated that they were not aware that they had learners who needed special attention in their classes. The respondents also indicated that Google classroom was the most effective online learning platform, and it was easy to use. They also alluded that they used pre-recorded videos in their classes. This promoted a flipped classroom approach allowing the students to view the material at any time. The lecturers also indicated that they used online assessments on their students, and they believed that these assessments were very effective.

5. Conclusions

The study was carried out at Midlands State University using a case study of the Marketing Department students and lecturers focusing on the online learning experiences for learners with special education needs. The objectives were assessing the perceived usefulness and ease of use of Google classroom, screen casts and online assessments. On the perceived usefulness and perceived ease of use Google classroom it was discovered that most of the students agreed that Google classroom was very useful and easy to use as an online platform. However, the students cited data challenges as well as network challenges as the main problems that affected them to fully utilize the Google classroom platform. They also indicated that they did not have the gadgets that are used to access online platforms. It was noted that learners with special education needs were exposed to the same online teaching methods as used for their counterparts, but no special arrangements were put in place. On the discussions it was also noted that those learners with special requirement were not coming up forth to inform their lecturers about their conditions. On the perceived usefulness of screencasts, it was discovered that the students were very comfortable with using pre-recorded videos. They indicated that they could circulate the downloaded with those without data to access the internet. They also highlighted that pre-recorded lectures enabled them to prepare for the lectures in advance. The perceived ease of use online assessments was also another area of interest. It was concluded that online assessments were easy to attend to. However, the student needed more handy methods like WhatsApp to be used for assessments.

5.2 Recommendations

The study made the following recommendations; (1) Lecturers needs to understand the different kinds of learners that they have in their classes so that they know how to handle them in the online environment. They need to be concertized that at tertiary education inclusive education is by de facto, it is unplanned, and they end up having those learners in their classes. Lecturers also need to be familiarized with Google extensions that are useful in helping learners with special education needs. Students also need to be encouraged to open and inform their lecturers about their special situations so that they can be easily accommodated in the classroom. (2) Students also needs to be assisted with data and gadgets to use during the online sessions. They also need to be educated on the different extensions on Google web that can be enhanced to improve their interaction on Google classroom. Lecturers should use more of pre-recorded lectures as they can be easily circulated among the learners. This will also assist those who will have failed to attend the live lectures. Also, those with special challenges can be easily assisted by their peers.

5.3 Area for further study

The researcher recommends research on inclusive education in tertiary education and the attainment of Education 5.0. This is because tertiary education institutions are guided by Education

5.0 hence there is need to investigate how inclusive education can help in the attainment of these goals.

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