

# Cross-cutting issues in Google Classroom use: Attitudes of undergraduate trainee teachers at one state university in Zimbabwe

Cuthbert Pisirai

*Department of Teacher Development, Great Zimbabwe University*

DOI: <https://dx.doi.org/10.47772/IJRISS.2021.5411>

**Abstract:** - The study explored the undergraduate student teachers' attitudes towards the use of the Google Classroom remote online teaching and learning. The qualitative research approach was employed and the Technological Acceptance Model was used to guide the research. The research participants were drawn from undergraduate full-time, final year students at one selected state university in Zimbabwe. The research participants comprised seventeen females and three male students. The study was necessitated by the need to establish cross-cutting issues in the use of Google Classroom in the Covid 19 era. The research study used online questionnaires which were administered through the WhatsApp platform. (Makurumidze, 2020). The research found out that students generally liked the Google Classroom application but formed some negative attitudes based on accessibility, affordability and flexibility. The study recommends financial and material support to cushion the student teachers in accessing data bundles and compatible gadgets for use in the Google Classroom. The study further recommends the training of students in the use of the Google Classroom.

**Key words:** Google classroom, cross-cutting issues, attitudes, affordability and accessibility.

## I. INTRODUCTION

The deadly and infectious disease, Corona Virus, also known as Covid-19, has deeply affected the global economy and education in particular has been extremely affected, as schools, universities and colleges have, all of a sudden been closed for face to face teaching and learning. The hopes of any nation are pinned on education which is used as a rainbow of hope for all its aspirations and survival. Universities, in particular, are used as engines of development due to their research output and innovativeness. The Covid 19 pandemic has cast a dark cloud of hopelessness where there used to be optimism. There is collective grief amongst nations globally as teaching and learning has been pushed into the virtual space. According to Dhawan (2020), the whole world is on quarantine due to the serious outbreak of this global Covid-19 pandemic. Therefore, many cities have turned into phantom cities and the effects of the pandemic can be seen in schools, colleges, and universities.

Admittedly, there is a myriad of challenges associated with remote learning using a variety of such online platforms as WhatsApp, emails, Google Classroom and Facebook. These

challenges push us to realise that scenario planning is an urgent need for academic institutions (Rieley, 2020). Dhawan (2020) posits that several factors are associated with e-learning, such as accessibility, affordability, flexibility, learning pedagogy, life-long learning and policy. The pandemic comes as a wake-up call for institutions of higher learning to measure their level of preparedness and ability to adapt their curricula to suit these peculiar needs. Universities, as engines of development, should quickly adapt and adjust their learning to the virtual space as the situation demands (Dhawan, 2020).

This paper looked at the attitudes of undergraduate teachers towards the use of Google Classroom as an online platform at a state university in Zimbabwe. The final year undergraduate trainee teachers doing Bachelor of Education, participated in the study to find out their attitudes towards the use of Google Classroom as an online learning platform. Positive attitudes towards that media or technology in education can improve the quality of learning or teaching. Thus, understanding users' attitudes toward learning technology, including instructors' and learners' attitudes, enables us to make learning more effective, efficient and appealing (Krishna kumar and Kumar, 2011). Gefen and Straub, (1997) assert that among the various theoretical models developed to examine users' intentions in using computer and communication technology, perceived usefulness is a key to influence behavioural intentions. Loague (2003) posits that since the 1970's, the implementation of technology in instruction in schools and higher education has been an uneven process of acceptance and use, despite the fact that digital literacy and computer skills are now an imperative requirement for anyone to participate in today's society. The study explored the attitudes of the research participants basing on the perceived ease of use, the perceived usefulness, accessibility, affordability as well as institutional support, financially and materially. Heggart and Yoo (2018) argue that these technologies may be incorporated into classrooms but with little understanding about their impact on actual teaching and learning practice and such slipshod or ad-hoc implementation can often fail to improve learning outcomes or student engagement, not through the fault of the systems but, rather, because of the lack of critical thought about how best to use these tools. Attitudes of the student teachers were also

measured against the sudden change in curricula in terms of pedagogy, as the change from face-to-face to the Google Classroom was wholesome, with little support from the institution and in the process deskilling students. The wholesome change induced by Covid 19 has left students to grapple with technology. The university under study, where the researcher teaches, recognises the Google Classroom platform as the only official platform for online teaching and learning; all other platforms are not officially accepted, which is a point to be considered in this discussion. The paper explored the major factors that catalyse the formation of attitudes towards the online Google Classroom platform by the trainee undergraduate student teachers. There should be a level of mutual support between platforms and pedagogies and this paper highlights some cross-cutting issues in the use of Google Classroom in higher education.

## II. BACKGROUND

Chang-Richards et al. (2013), cited in Tria (2018), argues that when both man-made and natural disasters occur, schools and universities need to be resilient and should find new ways to continue with teaching and learning activities. One of the most recent public health emergencies of global concern is the recent COVID-19 pandemic. It started in China and infected almost every country in the whole world. This disease is caused by a novel coronavirus (SARS-CoV-2, previously known as 2019-nCoV) and has received global attention because of growing infections and focus is on how to eradicate the disease and flatten the curve of infections (Guo et al., 2020). In March 2020, the World Health Organisation declared Covid-19 as a pandemic of international concern, after assessment of the rapid spread and severity of the deadly virus across the globe, with additional announcement of social distancing and masking as means of curtailing the spread of the pandemic which is highly contagious and fatal.

As the mortality rate scaled up, mostly in Asia and Europe, governments throughout the world induced lockdowns, with schools and institutions of higher learning closing doors for certain periods, assuming the virus would last only for a few months or so. The most worrisome issue is that there is no precedence of that nature where people can draw inferences from, in order to arrest the pandemic or to infer its lifespan. By virtue of being China's trading partners, most African countries were prone to the deadly virus particularly, South Africa and Zimbabwe (Makurumidze, 2020). Most countries responded by imposing travel bans for non-essential business, strict lockdowns and closing of schools to safe guard the lives of students and staff (Unicef, UN, Zimbabwe Situation Report, 2020). The government of Zimbabwe declared the deadly virus a national disaster on 19 March 2020. The government immediately launched an inter-ministerial task force, chaired by the Vice President and coordinated through the Ministry of Health and Child Welfare, and the coordination of the National Preparedness and Response Plan is done through Inter-Ministerial subcommittees organised

under various pillars of coordination (Unesco Report, 2020; World Bank Report, 2020).

In Zimbabwe, the education related Covid 19 preparedness and response activities are led by the Ministry of Higher and Tertiary Education (MoHTE) and is coordinated under the Risk Communication and Community engagement pillar at national level (Zimbabwe Situation Report, 2020). According to the African Bulletin (2020), the Ministry of Health heightened vigilance among Zimbabweans and rigorous observance of the enhanced prevention measures which were announced on the 30<sup>th</sup> of March 2020 by the President of the Republic of Zimbabwe. The government banned all non-essential movements and social gatherings and consequently all schools were closed initially for a period of 21 days but the ban gradually extended indefinitely, ostensibly to safeguard the health of teachers and students.

The Covid 19 pandemic worsened an already volatile and fragile situation in Zimbabwe, as she was already struggling with socio-economic and political unrest. The pandemic in Zimbabwe has broken out against the backdrop of a difficult macro – economic environment and climate shocks and these early indicators show that the health system will be stretched further (UN Report, 2020). The Zimbabwean context puts the whole matrix in a dilemma, as lack of similar reference to a similar crisis in the past makes it difficult to predict what may happen in future in terms of schooling. The education system was already stretched before the Covid 19 pandemic. With the pandemic, the learning inequalities will widen, marginalisation will increase and the most disadvantaged students will further be disadvantaged, as learning has been pushed into the virtual space, which demands more material and financial resources such as smart phones, laptops and data bundles. As a result of inequalities in the socio-economic status of students, some rely on the computer and free internet in school (Dermirbilek, 2014). Most students cannot access the internet outside the school and with current scenario where schools have remained closed, the situation has become complicated and not conducive for online learning.

The context under study presents a host of limitations, as universities were forced by reality to push their learning to the virtual space and had to adjust to the new normal. The university under study has two types of students, that is, the conventional full-time and the part-time block release students. The former group is largely rural and enrolled on maturity entry. The majority of students are digital immigrants by virtue of their age. Hayes (2019) postulates that digital immigrant is a term used to refer to a person who was raised prior to the digital age and these individuals did not grow up with ubiquitous computing or the internet, and so have had to adapt to the new language and practice of digital technologies. This can be contrasted with digital natives, who know no other world than one defined by the internet and smart devices. The fact that the majority of the student teachers are digital immigrants implies that they may be having some attitudes with digital learning. The university, through its

service arm, the Teaching and Learning Centre, has directed that all teaching and learning should be done uniformly using the Google Classroom as the only official platform. The fact that most students hail from the rural areas implies that connectivity is one major challenge which can lead to formation of attitudes towards the whole process. Most remote rural areas are not electrified. The Google Classroom, by its very nature, is not user- friendly. It requires one to be a digital native to navigate it. The perceived difficulty in accessing it and its affordability presents a challenge to the research participants, which results in the formation of attitudes towards the Google Classroom. The fact that there are other platforms which are cheaper and user friendly such as WhatsApp, but not recommended and supported by the university can be sufficient reason for formation of attitudes. The fact that online learning is not supported financially by the university may also present challenges to students.

This brief background has highlighted some challenges which make students form attitudes. These attitudes may be positive or negative, depending on individual student teachers, for instance, some students enjoy learning in the comfort of their homes, whilst others would prefer a conducive environment far from the home environment. The latter is what Adedoyin and Soykan (2020) term human and pet's intrusion. 'Human and pets' intrusion here is the unexpected appearance or interruption of family members, friends and or pets that may cause disruption or diversion of online learning participants' attention during the online teaching and learning process. The research, therefore sought to explore the cross-cutting issues in the use of Google Classroom in Higher Education. The paper interrogates attitudes of undergraduate teachers' attitudes towards the sudden change in curriculum implementation. This panic-approach or fire-extinguisher approach is devoid of surprises and constraints and the user system is bound to resist, depending on the nature of the technological change, particularly if the change is perceived as difficulty.

### III. RESEARCH OBJECTIVES

This study was guided by the following objectives;

- I. To find out the perceptions and attitudes of undergraduate trainee teachers' attitudes towards the use of Google Classroom as a teaching and learning online tool.
- II. To assess undergraduate teachers' abilities in the use of Google Classroom.
- III. To make recommendations on how the use of Google Classroom can be effectively used in the teaching and learning in higher education.

### IV. LITERATURE REVIEW

Noah and Gbemsola(2020) posit that Google Classroom is an online learning platform that could be used in any educational scope to find solutions to the difficulties experienced in making paperless assignments. Research shows that the

application is fairly novel to the education system as it was released publicly on August 12, 2014(Ramadhani, et al.,2019;Jazen, 2014).With the Covid-19 pandemic, it has become clearer that the education system is susceptible to external dangers (Bozkurt and Sharma, 2020). A study by Ribeiro (2020) on the African continent,established that the digital transformation of instructional delivery came with several logistical challenges and attitudinal modifications, particularly on affordability and perceived usefulness of the platforms.Another study by Adedoyinand Soykan (2020), in the Asian universities,on assessing the assumptions surrounding the digital transformation of Higher Education institutions cited Kopp,et al. (2019), who gave five common assumptions that are considered hindrances to digital transformation of higher education institutions. These assumptions are related to change, pace, technology, competences and financing. Azhar and Iqbal(2018) in Wa Hassan et al (2020), say that Google Classroom is accessible through web browsers as well as smart applications on Chrome OS, iOS and Android. The offers on all of these major platforms make it easy to access, and enable anyone to use, them. They further assert that, Google Classroom has officially become a learning platform in place of the traditional face- to- face teaching and learning, due to the Covid 19 pandemic. Google Classroom is user-friendly and has many educational benefits embedded in the application. In a study by Yates(2020) in India,it was established that Google Classroom's dependency on technological equipment and the provision of the equipment was a big challenge for institutions, faculty and learners. Students without-dated technological devices might find it hard to meet some of the technical requirements of the Google Classroom. This can be experienced particularly on retrieving and uploading data on the platform, especially when using outdated devices that are not compatible with the browser.

In Nigeria, a study by Noah and Gebmsola(2020), confirmed that Google Classroom promotes independent learning, critical thinking, revision of lesson materials, collaboration among students, and continuous assessment with immediate feedback. In addition, because of the current situation of the global pandemic (COVID-19), restricted movements and social distancing, the Google Classroom learning platform offers assistance to both students and teachers to connect, work together, create assignments, grade students and post materials. Likewise, students can ask questions about the areas they do not understand. Hence, Google Classroom, as an online learning platform, offers the advantage of achieving quality in the teaching and learning process at all levels of education, particularly during the Covid 19 pandemic period. Google Classroom provides a veritable platform for both teachers and students to utilise digital technological tools for students' engagement in an online environment. The platform promotes active learning, which makes the learning materials more accessible to students anywhere, anytime.

In a study carried out in Ghana by Henaku (2020), on the use of Google Classroom, the research participants were much

concerned about the internet bundles. They said it was expensive as Google Classroom consumes a lot of the internet bundles. They were concerned that the institution was not supporting them financially and materially. On the other hand, Okmawati(2020), affirms that the use of Google Classroom is practically easy and interesting to students. However, some features provided by the Google Classroom sometimes make the user confused due to some technical aspects involved. Gallagher(2005) posits that Google Classroom is effective at tertiary level, although there are some constraints such as good access to the internet, familiarisation with the application, accessibility and adaptability. Sukmawati and Nensia (2019) found out that university students who used Google Classroom felt excited, as the application can be accessed easily on smart phones, laptops, computers and related gadgets. Alim et al (2019) also argue that the use of Google Classroom can improve the attitudes of students towards adopting new technologies.

Abazi-Bexheti et al,(2019) postulate that Google Classroom is dependent on students' perceptions and experiences. This implies that when students do not perceive the system as useful, they will be unwilling to accept and use it. A research study by Al-Marouf & Al-Emran, (2018) also, confirms that both the perceived ease of use and usefulness in the Technology Acceptance Model (TAM) positively influence the behavioural intention, which, in turn, influences the actual usage of Google Classrooms. The two variables are crucial in shaping students' attitude towards Google Classroom as also confirmed by Baki et al,(2019).

Other studies, (Esber, 2019; Emran and Salloum, 2017; Al-Marouf and Al-Emran, 2018) also looked at demographic factors as key elements in steering attitudes towards the use of Google Classroom in higher education. It was established that male undergraduate students had a more positive attitude compared to their female counterparts in the use of Google Classroom. The great success in self-work management of a university course in Google Classroom depends greatly on an educational establishment policy (Al-Marouf and Al-Emran, 2018). The policy should set standards on circulation, progressive development in complexity and professional relevance of the Google Classroom platform. It implies that the content of the materials, tasks and tests, in terms of topics is selected according to the curriculum and range of standards of specialty and supported by resources and links in a virtual learning environment that is accessible from any students' devices, especially smartphones and tablets which are common to the ordinary student. If the policy does not support students financially and materially, it means that students have to develop some attitudes towards the Google Classroom platform. With additional technological support, student teachers can worry less about technological barriers and, instead, focus on learning (Johnson et al, 2016).

#### V. METHODOLOGY

The study employed the descriptive survey design which is qualitative in nature. Qualitative research was ideal for the present study because it permitted the participants to give narratives of their experiences and challenges in forming their attitudes regarding the Google Classroom. The study was conducted in Masvingo, at one selected state university, with twenty undergraduate final year students doing Bachelor of Education Degree (Primary) as participants. The undergraduate trainee teachers were purposively sampled from the university under study. The researcher was interested in understanding the participants' attitudes, based on their exhibited behaviours during the online lectures, particularly on attendance and participation. The research solicited attitudes of the digital immigrants as compared to other streams which are digital natives. The research participants were born before latest technology hence are bound to grapple with technology. The data were collected using online open ended questionnaires due to limited mobility induced by the national lockdown. Online questionnaires were highly successful as the research participants received the research questions through a WhatsApp group and responded almost at the same time and the responses were all collated in three days. The analysis of data was done qualitatively and the research questions served as a guide for conducting data analysis.

#### VI. THEORETICAL FRAMEWORK

This study was informed by the Technological Acceptance Model (TAM) which was propounded by Davis (1989). The theory argues that, generally, people accept or reject technology based on two main variables. These include perceived ease of use and perceived usefulness (Al-Marouf and Al-Emran, 2018). The researcher assumed that the participants might have developed some attitudes towards the technological innovation as it abruptly replaced the good-to-have narrative of face to face teaching and learning. This was done without any due planning both on the part of students and the university management. The demographic factors such as age and gender were considered, as the majority of the participants are digital immigrants who got placement to university on maturity entry, hence they lack the technological skills and self-drive to use technology. According to Lai (2019), in 1989, Davis used TAM to explain computer usage behaviour. The goal of Davis' (1989) TAM is to explain the general determinants of computer acceptance that lead to explaining users' behaviour across a broad range of end-user computing technologies and user populations. The basic TAM model included and tested two specific beliefs: perceived usefulness and perceived ease of use. Perceived usefulness is defined as the potential user's subjective likelihood that the use of a certain system will improve his/her action. On the other hand, perceived ease of use refers to the degree to which the potential user expects the target system to be effortless (Davis, 1989). The belief of the constant technological change simultaneously creates threats to established business models, while also offering opportunities for novel service offerings (Lai, 2016). Google Classroom comes as a curriculum game

changer and has the potential of catalysing the 4<sup>th</sup> Industrial Revolution (Technological Age) and the users' perceptions and attitudes based on accessibility and affordability.

## VII. FINDINGS AND DISCUSSION

The research investigated trainee undergraduate teachers' attitudes towards the use of Google Classroom at a selected state university in Zimbabwe. The study used twenty undergraduate bachelor of education (primary) final year students. The majority of students got placement to university on maturity entry, and their ages range from 25-35 and they are mostly digital immigrants. The researcher found out that most students had never used Google Classroom before and they liked it, although they had challenges in accessing it due to a plethora of challenges such as power and connectivity. The participants acknowledged that the platform was easy to use, as they could use it 'anywhere - anytime'. The majority of students who participated in the study expressed their interest in the Google Classroom, as it was easy to use and students could learn in the comfort of their homes. On the whole, students expressed their interest in the platform and one participant had this to say:

*Yes, I like Google Classroom due to the fact it is user friendly and enables me to communicate effectively with my lecturers and fellow colleagues. So far, I have completed submitting my course work and have received informative feedback, hence it is a super friendly learning platform in this Covid 19 era.*

The above response from the research participant resonates well with Krishnakumar and Kumar's (2011) findings at one institution of higher learning in India, who concluded that e-learning environments increasingly serve as important infrastructural features of universities that enable teachers to provide students with different representations of knowledge and to enhance interaction between teachers and students, amongst students themselves. The study further confirms that education in the digital world of today can actually make that meaningful shift by ensuring that if students do not learn the way they are taught, they can be taught the way they learn, hence, the Google Classroom becomes one of the most interesting and powerful tool to spearhead the 4<sup>th</sup> Industrial Revolution, the digital era particularly in crisis ridden circumstances of the Covid 19 pandemic. This pedagogical shift, when integrated into educational software and appropriate technology, can make learning exciting and enjoyable, while securing successful learning outcomes in shorter time frames. In their study Korobeinikova et al., (2020) found out that the Google Classroom has been chosen as the prior and dominant way to manage students' self-work, the selection of tasks and materials, progressive development in complexity and professional relevance. It means that the content of the materials is selected according to the curriculum and range of standards of specialty. Moreover, self-work assignments on a course are supported by

theoretical materials and students liked it most. One of the respondents also commented that:

*Google Classroom is the way to go, particularly under these difficult circumstances caused by the Covid 19 pandemic, the platform suits well as you can interact with the lecturers and fellow colleagues, and on personal basis. Information can be shared with ease and I like that trait most, and the feedback is excellent and I like it.*

The response above shows that the student teachers have a strong positive attitude towards the use of Google Classroom. The research established that about 80% of the research participants liked Google Classroom, despite some technical challenges. The research discovered that the majority of the undergraduate teachers liked the Google Classroom as a useful online teaching-learning platform. Janzen (2014) also confirms that Google Classroom's design purposefully simplifies the instructional interface and options used for delivering and tracking assignments; communication with the entire course or individuals is also simplified through announcements, email and push notifications. Further emphasis is placed on Google Classroom on the strength that it automates the use of other Google Apps such as grading and formative assessment. Feedback is also simplified and streamlined. Iftakhar (2016) also made a similar research and concluded that university students in Bangladesh liked Google Classroom because it is effective and easy to use. Generally, the students admitted that the Google Classroom platform was good and likeable as a catalyst of curriculum implementation in these difficult times of the deadly and highly infectious Coronavirus.

The research study also found out that the Google Classroom platform was good for the student teachers. However, it was not easy to access due to a number of technicalities such as lack of network connectivity, data bundles and the necessary gadgets for accessing the internet. Most of the students come from the rural areas where power outage is the norm, and some students live in remote rural areas where there is no electricity, resulting in minimum, if any connectivity. The above mentioned prohibitive factors make students have some negative attitudes towards the process. One of the respondents had this to say in relation to accessibility of the Google Classroom:

*I like the google classroom platform with reservations because of data bundles and network connectivity which are barriers to accessing the platform, even if data were to be provided, transmission speed is far much lower than expected. Imagine, my Huawei Y220 is not compatible with the Google Classroom browser. I need a newer version of the smart phone to access the platform.*

The research participants cited poor connectivity as the major hurdle in their online learning. They reported high cost of data bundles, which is way beyond the reach of many student teachers. The majority of the student participants were largely rural and live from hand to mouth. The extra demand for data

bundles is a challenge to many. It was not easy for them to quickly adapt the curriculum to suit their peculiar circumstances. In the study by Bondarenko et al (2017) on the use of Google Classroom in Ukraine had similar results and concluded that the disadvantages to take into account when organising distance learning through the Google Classroom are the predominance of external learning motivation and the low level of readiness of individual students for working in the new environment, lack of proper material and technical support for particular academic classrooms in higher education. The students were found to be forming attitudes due to lack of accessibility to the Google Classroom online platform, which requires blending (it requires other learning strategies such as face to face) to sustain teaching and learning in higher education. The blended learning model supports the learning process with a mixture of various learning activities such as face to face, media use, and digital internet based learning (Rufaidah et al, 2018)) In this research study one participant emotionally revealed that:

*The transmission speed is 2Mbps, I cannot browse or access large volumes of data like Google Classroom. At the present moment, I hate Google Classroom with a passion, because it is financially draining and academically frustrating. Why is the university not providing the data bundles? Why are we not allowed to use WhatsApp or emails?*

The response above shows some frustration on the part of the student teacher due to the inaccessibility of the Google Classroom platform and the cost related issues. There is a strong emphasis for institutional support, financial and material. The fact that students are footing their online learning bills in addition to the tuition fees, seemed to drain their meagre resources and the valence for paying tuition fees is not realised. Toquero (2020) carried out a study of similar nature and discovered that higher education institutions need to seize the opportunity to strengthen their evidence-based practices, provide accessible online services, and make the curriculum responsive to the needs of the changing society. The universities were found to be reluctant to fund online learning, citing poor revenue generation due to the persistent lockdown, coupled with low tuition inflows.

One research participant also expressed disappointment on the use of the Google Classroom, citing strong financial constraints, poor connectivity and the demanding nature of the platform:

*Google Classroom is more expensive and WhatsApp is better because the former demands expertise in computer usage and it is more sophisticated and I have never accessed it due to the nature of my phone and have developed a serious negative attitude towards the whole thing. Let's hope you will help us overcome this hurdle by alerting the university management of our serious concerns as regards online learning.*

Ludeman et al. (2009) cited in Toquero (2020), also carried out a research study on virtual learning and concluded that, for quality indicators of a higher education enterprise, there

should be a set of values and principles that account for the expressed needs of its stakeholders, particularly the students. On the same note, Heggart and Yoo (2018) also confirmed that as tertiary institutions come to rely more heavily on digital platforms to structure the learning experiences of students, it is important to carefully consider how pedagogical practices need to change in order to capitalise upon these changes. As outlined above, there is real need to provide a guide on making judgements about the efficacy of the Google Classroom platform and how best to use it in a tertiary setting, particularly in Third World countries where connectivity is a challenge.

The study also found out that the issue of affordability was a major concern. Most students felt that they were too constrained by the resources to afford data bundles and, consequently, student teachers formed some negative attitudes towards the Google Classroom learning platform. One student teacher in the study remarked:

*Google Classroom could be useful if all students could afford data bundles, as a result, I have a negative attitude towards the platform. It is very expensive and requires a strong financial status for data bundles and compatible gadgets commensurate with the application.*

The comment above resonates with the study that was carried out by Oswal and Meloncon (2014), who found out that student teachers could not afford data bundles and modern gadgets to harness the technology. They concluded that another restriction that has been brought to the forefront is the issue of the 'haves' versus the 'have-nots'. Technology is an area that can be easily taken for granted when it is intertwined with daily life. For many, technology is not vastly used due to lack of monetary means to gain online access and affordability. The study also noted that the student teachers could not afford to get the required modern gadgets such as smart phones with high internet speed as they were beyond their reach. Sudarsana et al (2019) also confirm that the weakness of Google Classroom applications is that it requires students to have a laptop, tablet, smartphone, and gadget that supports the Google Classroom feature. Google Classroom is further widening the gap between the disadvantaged students and the 'haves'. The student teachers lamented lack of support by the university management to cushion the already fragile situation of the marginalised students. The student teachers felt that there was no spirit of social justice, leading to high attrition, and all pointed to lack of social and academic integration. The student teachers lamented the unaffordability of the Google Classroom because of lack of institutional support, as the current set-up does not take into account student satisfaction in intellectual and technological development. Certainly, the most basic step toward effective technology integration is widespread access to equipment necessary to run educational computer programs (Johnson et al, 2016). If teachers are not provided with effective professional development on new technologies, they will not be capable of using them to their full potential (Bitner and

Bitner,2002).Factors related to the support constraint are key in the implementation of technology and if the students lack the technical and administrative support they will obvious develop a negative attitude towards the whole process. The study established that student teachers lacked institutional support in terms data bundles, electronic gadgets and training in the use of the Google Classroom. One participant remarked;

*It is as good as placing the horse before the cart, how can you expect me to perform effectively when I have not received any basic training in the use of the Google Classroom? The fact that we were born before technology implies that we need training and orientation in the use of these new technologies. I would suggest that training be done at the earliest possible convenience before the semester lapses.*

The participants revealed that they needed training in order to master the basics of the Google Classroom. The results resonate with the study of Abazi-Bexheti et al (2019) who found out that in some Asian universities, students who did not receive training in the use of the Google Classroom application developed a negative attitude towards the platform. It is imperative that training should be provided first before students could make use of the innovation.

#### VIII. CONCLUSIONS AND RECOMMENDATIONS

The study was carried out to assess the attitudes of student teachers towards the use of Google Classroom at one selected state university in Zimbabwe, and it was established that most student teachers liked the Google Classroom platform as a learning tool but expressed reservations on its affordability and accessibility. Student teachers expressed their displeasure at the level of support from the University. The research also established that the innovation was hurriedly done using the fire extinguisher approach as ‘the house was on fire’. There was no systematic planning on the use of the online platform. The Covid 19 pandemic pushed learning to the virtual space without taking all the necessary planning and training, as is the norm with all curricular reforms. Over and above, the financial and material support, the research established that the student teachers needed training in the use of technology as they were not digital natives. The student teachers had challenges in accessing the Google Classroom due to some outdated gadgets which they used and generally, the teachers had negative attitude towards the use of the platform. The study recommends that institutions of higher learning should e-resource student teachers and help them fund their studies through availing grants so that they can be able to access technology with ease. The study further recommends that technology should be made available to all students despite their socio-economic backgrounds. The study recommends that there should be adequate training on the use of the Google Classroom platform and there should also be adequate technical, administrative and peer support in order to effectively harness the technology. Finally, the study recommends that institutions of higher learning maximise the

use of technology during the pandemic as a catalyst for the spearheading the 4<sup>th</sup> Industrial Revolution, the technological era.

#### REFERENCES

- [1]. Abazi-Bexheti, L., Kadriu, A.-T. M., & Abazi-Alili, H. (2018). LMS Solution: Evidence of Google Classroom Usage in Higher Education. *Business Systems Research*, 31-43.
- [2]. Adedoyin, O., & Soykan, E. (2020). Covid-19 pandemic and online learning: the challenges and opportunities. *Interactive Learning Environments*, 1-11.
- [3]. Al-Marouf, R., & Al-Emran, M. (2018). Students Acceptance of Google Classroom: An Exploratory Study using PLS-SEM Approach. *International Journal of Emerging Technologies in Learning*, 111-123.
- [4]. Bitner, N., & Bitner, J. (2002). Integrating Technology into the Classroom: Eight Keys to. *Journal of Technology and Teacher Education*, 95-100.
- [5]. Bondarenko, O., Mantulenko, S., & Pkilnyak, A. (2020). Google Classroom as a Tool of Support of Blended Learning for Geography Students. *National Pedagogical University*, 13-26.
- [6]. Dermirbilek, M. (2014). The digital natives' Debate: An investigation of the Digital Propensities of University students. *EurasiaJournal of Mathematics, Science and Technology Education*, 10-29.
- [7]. Dhawan, S. (. (2020). Online learning :A Panacea in the Timeof Covid 19 Crisis. *Journal of Technological Education System*, 5-22.
- [8]. Gallagher, J. (2005). “Webbased vs . Traditional Classroom Instruction in Gerontology”: A Pilot Study. *International Journal of Education*, 1-10.
- [9]. Gefen, D., & Straub, D. (1997). “Gender differences in the perception and use of e-mail: An extension to the technology acceptance model”. *MIS Quarterly*, 389-400.
- [10]. Heggart, K., & Yoo, J. (2018). Getting the Most from Google Classroom: A Pedagogical Framework for Tertiary Educators . *Australian Journal of Teacher Education*, 140-153.
- [11]. Henaku, E. (2020). COVID-19: Online Learning Experience of College Students: The Case of Ghana. *International Journal of Multidisciplinary Sciences and Advanced Technology*, 54-62.
- [12]. Iftakhar, S. (2016). Google Classroom: What Worksand How? . *Journal of Education and Social Sciences*, 2289-9855.
- [13]. Johnson, A. M., Jacovina, M. E., Russell, D. E., & Soto, C. M. (2016). Challenges and solutions when using technologies in the classroom. *Adaptive Educational Technologies for Literacy Instruction*, 13-29.
- [14]. Kopp, M., Groblings, O., & Adams, S. (2019). Five Common Assumptions Preventing digital Transfmationat higher education institutions. *International Education* (pp. 1448-1457). NewYork: INTED.
- [15]. Korobeinikova, T., Volkova, N., Kozhushko, S., Holub, D., Zinukova, N., Kozhushkina, T., & Vakarchuk, S. (2020). Google cloud services as a way to enhance learning and teaching at university. *International Journal of Education*, 106-118.
- [16]. Krishnakumar R and Kumar, R. (2011). Attitude of Teachers’ of Higher Education towards e-Learning . *Journal of Education and Practice*, 48-54.
- [17]. Makurumidze, R. (2020). A case series of early suspected cases reported and implications towards the response to the pandemic in Zimbabwe. *Journal of Microbiology, Immunology and Infection.*, 493-498.
- [18]. Noah, O., & Gbemisola K, O. (2020). Impact of Google Classroom as an Online Learning Delivery during COVID-19 Pandemic: The Case of a Secondary School in Nigeria. *Impact of Google Classroom as an Online Learning Delivery during COVID-19 Pandemic: The Case of a Secondary School in Nigeria*, 53-61.

- [19]. Okmawati, M. (2020). The use of Google classroom during pandemic . *Journal of English Language Teaching*, 2302-3198.
- [20]. Oswal, S. K., & Meloncon, L. (2014). Paying Attention to Accessibility When Designing Online. *Journal of Advanced Academics*, 271-300.
- [21]. Ramadhani, R., Umam, R., Abdurrahman, A., & Syazali, M. (2019). The Effect of Flipped-Problem Based Learning Model Integrated with LMS-Google Classroom for Senior High School Students . *Journal for the Education of Gifted Young Scientists*, 137-158.
- [22]. Ribeiro, R. (2020). *How university faculty embraced remote learning*. Geneva: EdTech Magazine.
- [23]. Rieley, J. (2020). *Corona Virus and its impact on higher education*. Research Gate. Save the Children. (2014). *No child left behind, Education in crisis in the Asia-Pacific Region* Victoria. Save the Children. (2015). *Half of all school attacks in Syria*.. Victoria: Save the Children.
- [24]. Rufaidah, E., Atrisyadi A, K., Saregar, A., & Umam, R. (2018). The Effect of HALAL Label to Increase Domestic and International Tourism : Case Study In Lombok, Indonesia. *International Journal of Management and Business Research*, 29-36.
- [25]. Sudarsana, K., Putra, B., Astawa, & Lali, I. (2019). The use of Google classroom in the learning process. *1st International Conference on Advance and Scientific Innovation* (pp. 1-5). Indonesia: Journal of Physics.
- [26]. Sukmawati, S., & Nensia, N. (. (209). The Role of Google Classroom in ELT. *International Journal for Educational and Vocational Studies*, 42-45.
- [27]. Thabela, T., Shumba, T., & Muntanga, D. (2020). *Zimbabwe Situation Report: Covid 19 Response and Preparedness*. Harare: Government Printers.
- [28]. Toquero, C. M. (2020). Challenges and Opportunities for Higher Education amid the COVID19 Pandemic: The Philippine Context. *Pedagogical Research*, 2468-4929.
- [29]. Tria, J. (2020). The COVID-19 Pandemic through the Lens of Education in the Philippines: The New Normal . *International Journal of Pedagogical Development and Lifelong Learning*., 2732-4699.
- [30]. UNESCO. (2020). *Covid 19 Education Response*. Geneva: UNESCO organization.
- [31]. Wa Hassan W.A.S, Arffin,A., Ahmad, F.,Sharberi,S.N.M., Nor Azizi M,I,Zulkiflee S.N. (2020). COVID-19 Pandemic: Langkawi Vocational College Student Challenge in Using Google Classroom for Teaching and Learning (T&L) . *International Journal of Advanced Trends in Computer Science and Engineering* , 3299-3307.
- [32]. Wan Hassan, W. A. (2020). COVID-19 Pandemic: Langkawi Vocational College Student Challenge in Using Google Classroom for Teaching and Learning (T&L) . *International Journal of Advanced Trends in Computer Science and Engineering* , 3299-3307.
- [33]. Yates, D. (2020, March 17 1). Personal Communication on digital learning. *Adventure works Monthly*, pp. 1-2.