Capabilities of Google Classroom as a Teaching and Learning Tool in Higher Education

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Abstract

This study intended to research the adequacy of Google classroom as a teaching and learning tool among higher education science training learners. The exploration outline for this study was a descriptive and interpretive investigation that was dissected quantitatively. A quantitative questionnaire was composed and was utilized to answer the fundamental target of the investigation. The sample of this study was sixty third year Healthcare Service Management learners who have been using Google classroom for two semesters (8 months). The study embraced the quantitative design approach in which the learners were utilizing Google classroom for two semesters as a teaching and learning tool. Data collected was analysed using graphs and bar charts. A social constructivism theory which entails that human beings learn to their surrounding and experiences was adopted for the purpose of this study. The outcomes from this study demonstrated that Google classroom is compelling in educating and learning as the outcomes demonstrated that it improves teaching and learning.
Keywords: Training; E-Learning; Google Classroom; Learning, Tool; Instruction

I. INTRODUCTION

The introduction of web 2.0 tools and above in the instruction division is anything but another thing. For a long time now, institutions of learning around the world have endeavoured to utilize these tools in the conveyance of educating and adapting, some have been fruitful in enhancing instruction and learning and some not. The assumption is that these tools can enhance in contact classroom instruction as well as that its intuitive nature and need for life after school effectively affect the learner's education (Keppler, Weiler, and Maas, 2014). Google Classroom is a free web based learning application or tool that is utilized for collaboration among instructors and learners. This is a learning management system in which instructors can create classes, invite and welcome learners to the class and start exchanging course content materials. It empowers learners and teachers to; communicate announcements, assignments, notes posting, submission of assignments and projects. Learners can similarly check and monitor their grades after the educators have consigned and evaluated those. Google Classroom moreover encourages parent participation, in which teachers can invite and add parents on the platform with the objective that they can track and check the performance and summaries of their children's work. Parents are able to view how their children are taught and can comment to give direction where needs be, thus collaboration which is an acknowledged change in the teaching and learning fraternity. Bebell and Kay (2010) considers Google classroom as the best instrument to enhance teaching and learning. They moreover said that it gives a room of pivotal features that make it an ideal tool to use by learners and teachers. This is a free Google online learning management system free and open to any person who has a Google email account.

II. RESEARCH QUESTIONS

The exploration inquiries of the study were;
1) Is Google classroom effective in improving teaching and learning?
2) Has knowledge and skills gained through e-learning via Google classroom better than knowledge gained during lecture hours?
3) What are the view of learners about e-learning through Google Classroom?

III. LITERATURE REVIEW

This investigation adopted the social constructivism theoretical frame work which involves that individuals learn better through their surrounding and experiences. John Dewey and Lev Vygotsky implied that human being's learning and encounters is indistinguishable, which they go as one and bolster each other (Liu and Chen, 2010). This clearly means that, above all, when learners start utilizing Google classroom services, they gain from their association with the facilitator and their encounters on utilizing taking in administration frameworks from the facilitator. Learners can learn at their own opportunity without association and push from others, learning happens whenever with no time constrain given the learner has association with web availability (Desmond and Mafa, 2017). Skills and knowledge are not impacted to them only through in contact classroom hours, yet rather through and e-learning platform through joint effort with the others (Desmond and Mafa, 2018). This is referred to by Lin and Jou

(2013) as a test inclusion in getting. Ouyang and Stanley (2014) concurs that diverse types of this hypothesis have been utilized in educating and learning, with the focal point of moving far from instructor focused philosophies to learner centred pedagogies.

The utilization of technology innovations have been thought to be powerful in disseminating instructions, however, no investigation in Botswana has concentrated on the adequacy of Google classroom use in teaching and learning as a tool concentrating on the focus of learning instructional methods. Technology innovation as concluded by (Mafa and Desmond, 2017) permits a few exercises for use in and outside of the classroom. It advances community oriented learning and influencing learners to know what is occurring around them and to have the capacity to make future expectations. In help of the above conclusions, a study on the utilization of Web 2.0 tools and above by Ajjan and Hartshorne (2008), who evaluated the familiarity with employees in the utilization to help in class learning, found that employees felt that the device which was under scrutiny could enhance learning.

A. Advantages of using Google Classroom in Teaching & Learning

The following are the benefits of utilizing Google classroom for teaching and learning;
1) It empowers teachers to post class materials, e.g.: assignments, announcements, due dates and the learner can see all that is posted by the instructor. It likewise empowers learners to have the capacity to remark and make inquiries on the web with the goal that others can likewise remark and post back.
2) Google classroom interfaces with ones Google drive and effectively oversees data in a folder. At the point when learners submit assignments, and the instructor posts learning materials and notes, all the materials is overseen in one central folder in Google drive. This folder can be visited whenever needs be.
3) Google classroom can be assessed anytime whenever utilizing a personal computer or any gadget with web association and an internet browser.
4) It empowers ongoing learning on the grounds that the learner and the instructor can be sited on various geographical settings and when one post announcements or remarks, the other individual can see them in a flash. At the end of the day, it permits ongoing collaboration, in which learners can share thoughts in a flash, upload documents and assignments.
5) It permits formation of private classes and groups so that there are no interlopers to unapproved groups or classes. This guarantees protection and classification when learners are to present their class assignments and submit projects.
6) Google classroom allows the teacher to welcome and associate the guardians so they can track their children's performance and get email declarations relating to the learning of their kids.

Janzen (2014) has noted that Google classroom is easy to interact with and use. He further concluded that it spares time since it have an easy to use interface and one doesn't battle to utilize it since it integrates the utilization of other Google applications including; docs, slides, and spreadsheet. Chehayeb (2015) added that they designed this classroom to be paperless and to spare time, thus its benefits. He said other intriguing highlights that it can send out evaluations to Google Sheets and Microsoft excel for simple altering, and amending the remarks and marks of the learner. (Ajjan and Hartshorne, 2008) remarked that this web 2.0 tool is effectively open to both the learner and the instructor completely in an online environment and that it isn't accessible and available to learners who don't belong to an instructive establishment or who are a part of some course. One can download this free application and install it in his/her mobile technology device, this makes learning on the go and easy. The primary tool to use in teaching and learning now days is the mobile technology devicedevice (Mafa and Desmond 2018).

IV. METHODOLOGY

A. Design

The learners have been utilizing Google classroom in their teaching and learning continuously for eight months. There was coordinated effort between them and the instructor. The teacher posted announcements, notes, assignments, and reviewed the learner's performance. The learners were consistently participative and could see and respond to any communication that was exchanged timeously. They reacted to remarks, downloaded course content notes and uploaded assignments and all the supporting documents online. They could track and view their progress in the learner's portal. This study adopted a quantitative research technique approach since it took a gander at connections among factors and attempted to set up circumstances and end results in exceptionally controlled areas. Quantitative research is a numerical portrayal and control of perceptions to describe and clarifying the marvels that those perceptions reflect. Likewise, as per Cohen and Manion (1980) quantitative research is characterized as social research that utilizes observational strategies and articulations. The utilization of a quantitative methodology guaranteed that there are no 'holes' in the data gathered, thus ensured generalization of the results. The responses from this study were based on the activity that was done – using Google classroom in teaching and learning.

B. Participants & Sampling

The sample for this study comprised of sixty participants who were doing third year Degree in Healthcare Service Management in an institution of higher learning. Purposive sampling was utilized in selecting the participants. This was done in light of the fact that the sample were learners who have been utilizing Google classroom in their instruction and learning for eight months. This is

bolstered by Tashakkori and Teddlie (2003a, p. 713) when they attested "purposive sampling methods include choosing certain units or cases in view of a particular reason instead of arbitrarily".

C. Methods of Data Generation

A quantitative questionnaire was designed and used to collect the data for the study. It was utilized to solicit responses and reactions which addressed the research questions under study. Collected data was entered and analyzed using bars graphs and charts from Microsoft excel to make the analysis easier to interpret and understand. Only the learners who utilized Google classroom for eight months were the only ones who responded to survey.

D. Ethical Considerations

All the participants of this study were not compelled to be a part of this study without their will. Nobody was denied to leave the study after it has started, all were allowed to go at whatever point they felt so. The reason for conducting the study was disclosed to the participants and everyone was allowed to be a part of this study. Agree to take an interest in the study was given to the researcher by participants.

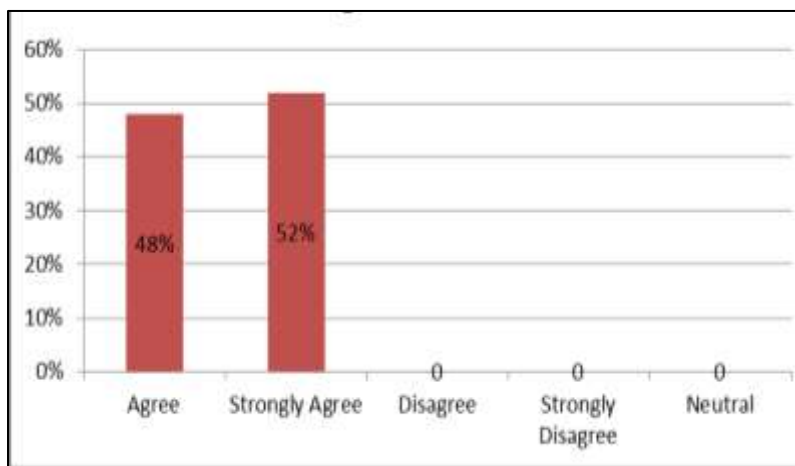## V. RESULTS & DISCUSSION

Fig. 1: Does Google Classroom Enables the Facilitator to Provide Wider Teaching and Learning Resources?

The results in figure 1 show that Google classroom enables the facilitator to give a more extensive scope of assets for instruction and learning. Greater part of the learners emphatically consented to the inquiry presented. This is a direct result of the many easy to use features which are given by this learning management system, for example, having the capacity to download notes, assignments records, uploading videos, uploading audio, transferring notes and have the capacity to keeping tabs on their development regarding scores. It likewise enables one to see posts and notifications from either the facilitator or the learner.
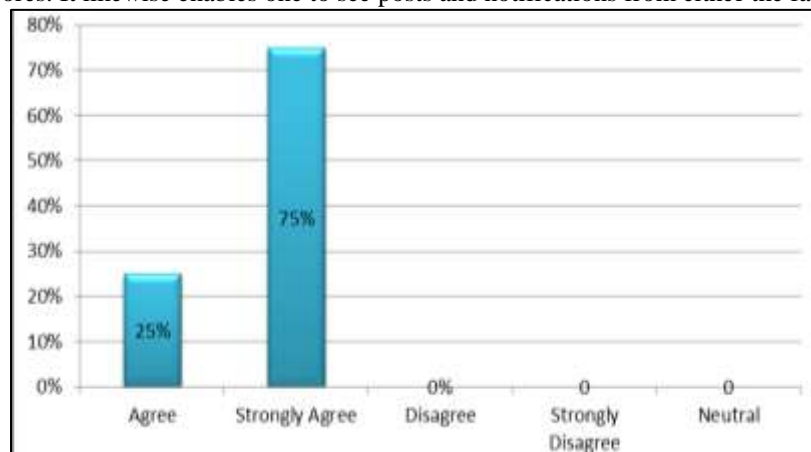

Fig. 2: Learners Motivation to use Google Classroom in Teaching and Learning

Figure 2 shows that learners can work, read, contemplate and do their school work without intrusion or any push from their schoolmates using Google classroom. They can react to the facilitator's directions all alone in their own space and time. Learners are motivated to learn online using Google classroom as a tool on the grounds that with Google classroom, learning never stops, it

goes past classroom contacts. Over 70% emphatically consented to be motivated in utilizing Google classroom in their learning. This is a direct result of its easy to utilize interfaces, and that it is easy to use.
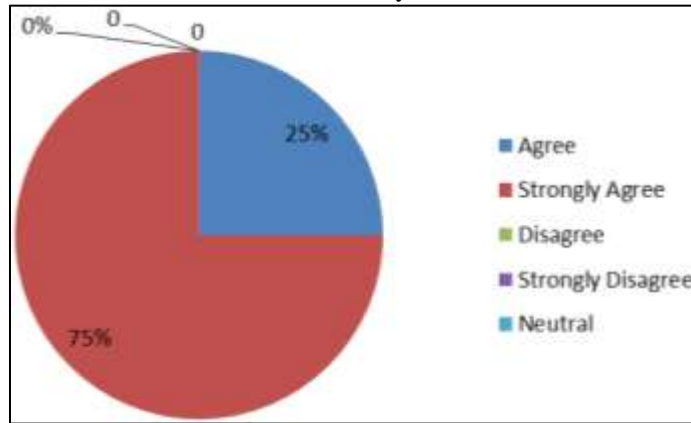

Fig. 3: Comparison of Google Classroom and In-Classroom Contacts

Larger part of the respondents favoured Google classroom to be superior to in - classroom contacts hours. This is a result of the adaptability it gives. They can learn alone in better places and areas, work cooperatively with their companions and educators in an e-learning environment on their free will. All the course content materials are available on the web. This empowers one to learn interactively. Learners and facilitators can set meeting times and can learn in real time from diverse closures, in this manner the reactions given by the learners matter for the evaluations to access learning extent.
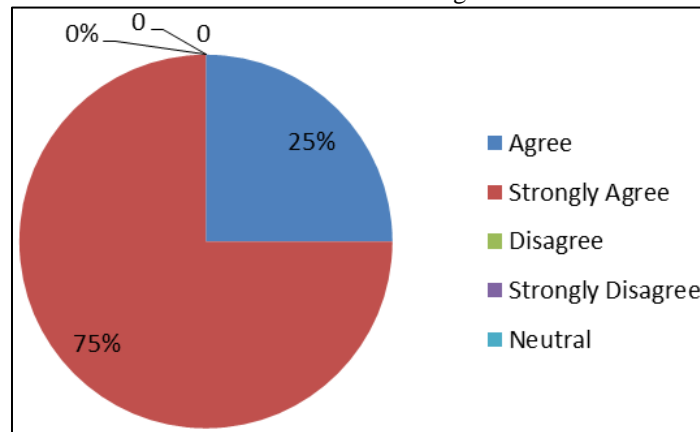

Fig. 4: Google Classroom and In-Classroom Contacts Compliments

Figure 4 shows that Google classroom and in - classroom contacts supplements each other. This is on the grounds that every materials and declarations made and given amid class are additionally accessible in Google classroom. Along these lines, if the learner did not wheeze or learn enough content in the classroom, he/she can visit Google classroom and continue learning.
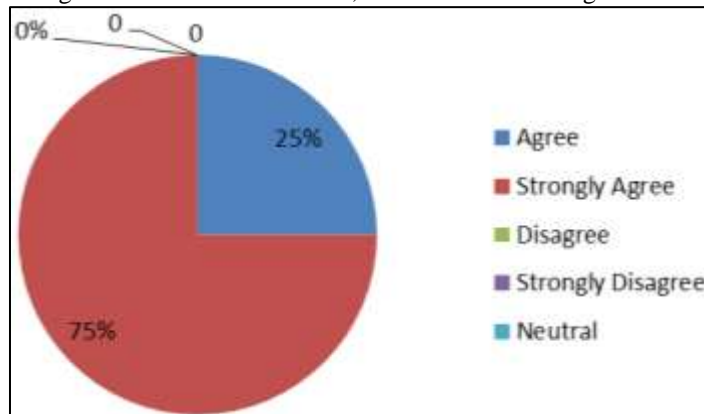

Fig. 5: Is Google Classroom the Best Tool for Teaching and Learning?

All the respondents saw Google classroom to be the best tool for instruction and learning as shown in figure 5. This is on account that Google classroom gives a simple, paperless web based learning environment. Learners don't need to come to class in the event

that they are associated with this web based learning management tool. They can learn in anyplace as said above. The reactions were depended on the utilization of Google classroom as a teaching and learning tool contrasted with other web 2.0 tools learners may have utilized previously.

VI. CONCLUSION & RECOMMENDATIONS

The results enabled the researcher to infer that in fact Google classroom is a powerful tool in instruction and learning among higher education learners. Additionally, the outcomes have appeared and inferred that learning and acquiring skills and knowledge through Google classroom is preferable over that which is acquired through in-classroom contacts. This is on account that learners can take more time learning, in their own space than in the classroom. Amid classrooms contacts, the results enabled the researcher to arrive to the conclusion that Google classroom is the best teaching and learning tool ever used. The researcher also concluded that when learners are distant from everyone else, through the utilization and help of Google classroom, they have their own opportunity to learn and comprehend ideas effortlessly without a push. The researcher recommends facilitators to take advantage and utilize Google classroom in their teaching in light of the fact that it gives a rehash of what they have said and done amid classroom addresses. It is likewise recommended that higher education institutions should to give portable technology gadgets or potential mobile devices to their learners to exploit this internet inclining learning tool since it encourages learning 24/7 beyond classroom contacts. Learners can be in class notwithstanding even when they are boarding any form of transport.

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