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Engaging Creative Arts Learners through Google Classroom Instruction (GCI)

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Abstract

The new ages in educational scheme are finding their feet to technology at a speedy pace and it, in turn, assisting both the learners and the instructors on the perceived use of technology in instruction within the scope of the classroom. Among these technologies of instruction is the Google classroom. Google classroom is therefore explained as an online instructional skillfulness of instruction within the closet that permits participants to exchange a few words with one another, view videos, relates within the groups. However, despite its worth, value and significance to instructional delivery by the instructors have not been considerably recognized. Therefore the objectives of this study were: to identify the performance score of learners taught via Google Classroom, to examined the achievements of female and male learners taught using Google Classroom and also, to looked at the efficacy of Google classroom on the learners' development of creativity of arts in the Nigeria Junior Secondary School context. The experimental designed type of the pre-test and posttest is used to carried out the study. The study involved 61 learners and they were further stratified along gender. The Google Classroom courseware and validated test along the marking guide were presented as the study instruments. Two hypotheses were tested at 0.05 significant. The study concluded that Google Classroom enhances and promotes the learning of creative arts and that the instructor should learn how to produce the courseware, utilizes the courseware for instructional delivery to benefit the learners in creative arts instruction in Nigeria.

INTRODUCTION

The creative art curriculum in Nigeria Junior Secondary School consists of both presumption and reality but the learners perceived the curriculum as abstract. Although, art has been traced to the reality and deeds of the cave men (Herzog et al., 2014). Art is an act of creating new things (Odewumi, et al., 2018). The literature by Jacquette (2014) and Fieser (2016) explained the word art as a creative way of expressing individuals in diverse ways. In the school curriculum, the creative arts curriculum is facing many challenges. Studies have mentioned the challenges confronting the teaching of arts. For example, Maurice, (2012) stressed the shortage of related art texts and qualified arts instructors. Soetan et al. (2013) mentioned sentimental in teaching in the part of some topics taught by the art teachers. Also, Opoko and Nwade (2014) submitted that low recognition of art by the government and lack of experienced art teachers to transfer artistic knowledge and skills. In the same vein, Olurinola (2016) complained about the poor condition of art workshops, studios, and uses of outdated art tools for art instruction.

The study by Kassah and Kemevor (2016) mentioned outdated art tools and materials. The above problems can be alleviated through the use of technology in instruction. Although, Duh and Zupančič (2011) believed that using a specific teaching method in introducing art to learners. The author emphasized that technology in aesthetic assist in the transferring process. Whereas, Brajčić et al. (2011) mentioned that learners will pick both information and aesthetic components of arts through

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the process. Studies suggested ease of use of technology in learning in transferring process knowledge of arts to learners. The utility of technology has become a crucial part of the learning process both in and outside the classroom setting. Technology provides positive in instructional delivery, motivating learning experience and gives a powerful stimulus to learning. Thus, the integration of technology to classroom instruction makes learning more effective and meaningful to both learners and teachers (Ahmadi, 2018; Ghavifekr & Rosdy, 2015; Hill & Uribe-Florez, 2020; Turunen, 2019; Uhomoibhi & Ross, 2018). Modern technological devices are of paramount importance in the educational process because it is based on a practical application which generates an interactive learning environment built on learner-centered (Raja & Nagasubramani, 2018). Educational institutions used technological tools for methods and designing programs of instruction which is based on interactive software and interactive educational pedagogy (Bagabas, 2017). That is why, the present study utilized the technology designed for e-learning of GC on the junior secondary creative arts curriculum.

The trends, growth, and spread of technology in instruction have brought massive involvement and interest in developing how technology devices and internet facilities can improve and benefit the educational process especially the use of technology in the classrooms (Rahmany et al., 2014). Despite awareness and the benefit of the internet to instruction, technology in instruction became known through the advent and continual use of the internet by the instructors in a scholarly way for both teaching and learning. More so, many pieces of research have been done on the internet and learning. For example the study of Wang et al. (2012) explained that Google is the most known Web 2.0 device that offers many applications and interesting facilities on learning globally. It also has the potential of ease of use for instructional delivery and functions in diverse ways for learning but it offers social, pedagogical, and technological affordances for both instructors and learners. Similarly, Eid et al. (2018) confirmed the usefulness of Web 2.0 technologies stem such as Edmodo, Zohowriter, Google Docs, Wikis, Blogs and Facebook of 21st century as very prominent and useful for virtual classroom learning. In the same vein, Muslimah (2018) succumbed that Google Classroom provides ease of use and collaboration between the teacher and the student anytime and anywhere through an internet network. In essence, a Web 2.0 technology assists the students to partake in the learning process and establishes flexible communication in taking various instructional tasks (Cummings, 2016). This is so because the technology of this age is ubiquitous, in that it is anywhere and the trend is being utilized by educational systems at a rapid pace.

In another development, this study adopted a theoretical framework that was based on social constructivism. The framework stressed that individuals learn better with their surroundings and experiences. The study of Liu and Chen (2010) explained that John Dewey and Lev Vygotsky emphasized individual learning acquisition through personal encounters with one and others within a specific environment. The clarity it exhibits here is that learners use of Google classroom, in the tendency of collaboration, association and mutual engagement within the learners' environment on a given task.

Although, through trend in technology innovations Google Classroom came into existence. History has it that the Google Classroom belongs to a novel tool that came to reality through Google Applications for Instructions (GAfE) in 2014 (Shaharane et al., 2016; Sondgeroth, 2018). It is of Web 2.0 tools that have a prospect for learning and teaching in diverse ways and forms (Wang et al., 2012). Google Classroom is developed purposely to enhance perfection and permanent in learning. Several studies suggested that Google Classroom improves student's understanding and comprehension of the content. It is also considered as the best out of the outstanding platforms for enhancing instructors' workflow (Bhat et al., 2018). Google Classroom provides a group of powerful character which make it a powerful tool in the hand of the students. It helps instructors to manage well their time, organize classes, and improves communication links with the learners. It is easy to access for anyone through Google Apps for Education (GAfE) and set of productive tools which including Gmail, Docs, and Drive (Google, 2017). In essence, these tools in Google Suite offer superfluity of opportunities in the part of learners to explore different options for learning encounters.

According to Shaharane et al. (2016) Google Classroom was introduced in 2014 along with the (GAfE) Google Apps for Education. This new device of Google facilitates the teachers' works alongside the students' assignments and providing feedback with ease. Google Classroom (GC) is also web-based podiums that facilitate teachers creating and receiving student's assignments in paperless form (Google, 2017). More so, Google Classroom (GC) is a tool from the technologies of Google which are Google Drives, Google Docs, and Gmail. In this regard, the instructor can create Google Classroom, for a sect of learners in a discipline and include more competent and experienced instructors for sustenance.

Furthermore, some studies even argue that using Google classroom is more effective than a normal classroom. The advantages of Google Classroom have been itemized by scholars. For example, the study by Mafa (2018) listed the benefits of Google Classroom in support learning process as flexibility in terms of both the students and teachers in access features in Google Classroom, safety and security learners through using of code, promoting collaboration in the part of learners and good classroom management. Pritasari and Jumadi (2018) mentioned that Google class application is material related to positive learning of both premise and handy topics in diverse issues. Also, Nagele (2017) mentioned that Google Classroom is of help to all categories of learners and makes teachers easy in handling students works. Likewise, My and Samkova (2016) submitted that through Google Classroom, instructions are displayed in sequential order. However, it is confirmed that utilizing Google Classroom increases students' cognitive knowledge (Sergeeva & Nikitina, 2016). In essence, it can be assumed that Google Classroom, has the power to leverage the classroom instruction is diverse ways and of benefits in several issues that are relevant to classroom instructional delivery.

In another word, the Google Classroom application is integrated with problem-based learning that helps in solving different educational tasks relating to learning both topics and practical issues (Pritasari & Jumadi, 2018). Google classrooms are extremely simple, helpful, and highly motivated tools in the learning process (Rana et al., 2018). Through GC, the results obtained by students proved the increments in the technological skills in handling tasks (Abazi-Bexheti et al., 2018). In another development, Keeler (2014) mentioned that Google Classroom makes counselling possible through instruction and while, Crawford (2015) stressed that GC promotes collaborative learning in terms of teacher to student and students to students. Google Classroom can be classified as a clever instructional tool in teaching and learning.

Empirical evidence on Google Classroom to perceived use in the context of higher institution has been looked into by the scholars. For example Stavvytskyi and Urazgaliyeva (2018) mentioned the use of Google Classroom is teaching of economics through cloud technologies. The findings prove that using Google Classroom allows the increment in the cognitive level of students and motivate the learners to study the economy. Also, Shaharane et al. (2016) worked on the efficacy of the Google Classroom in Teaching and Learning, the results proved that students were satisfied with the Google Classroom's tool usage for collaboration, delivery of instruction and students were satisfy towards the use. Similarly, Rabbi et al. (2018) researched the use of Google Classroom in developing listening skills in Bangladesh, the study concluded that Google Classroom enhances and promotes easy listening skill in tertiary level. Heggart and Yoo (2018) researched on the efficacy of getting the most from Google Classroom, the study identified four concepts of successful learning platforms of Google classroom such as ease of access, student voice, agency, collaboration, and pace. Also, Azhar (2018) confirmed Google Classroom as a facilitation tool for uploading, delivery of announcements, and giving effectiveness of assignments thereby having a positive influence on individual learning.

However, Google classroom has become a vital tool in both the social and instructional arena globally. Empirical evidence on the judicious usage of the Google classroom for instructional sharing is inconclusive. For example, the study of Hidayat et al. (2019) studied utilizing the Google Classroom by the pre-service student teachers' in the blended course. The results showed the ease, improvement of blended qualitative lectures through the Google Classroom. Likewise, Harjanto and Sumarni (2019) studied teacher's perception in using Google Classroom as a learning tool, the study concluded that Google Classroom was helpful in a virtual classroom and bring benefits to the teaching

profession. Also, DiCicco (2016) researched the efficacy of Google Classroom on the delivery of social studies instruction among the disabled learners, and the result proved the learning to be positive. Likewise, Bhat et al. (2018) examined e-learning assignment with Google Classroom in the context of usability of postgraduate scholars on computer applications. The study concluded that it was easy to keep tracking and assessing the learners' assignments, submission via the e-learning as opposed to traditional manual submission. More so, Almara'beh et al. (2015) researched the efficacy of Multimedia Learning Devices Instruction, (MLDI) the study revealed the supremacy and enhancement of learning through multimedia technology.

The introduction of technologies and the internet electronic media has improved the quality of the learning delivery system. E-learning consisted of 'E' which is the abbreviation of 'electronic' and 'learning'. It is a means of learning with electronic devices that are supported strongly through technological services like telephone, videotapes, audio, computer, or satellite transmissions. The study by Jaggars (2014) clarified e-Learning methods as a long-distance method of teaching emerged in solution to learners' complaints of the face-to-face method of teaching. In the same vein, Aslanian and Clinefelter, (2013) expressed e-learning or distance learning as very comfortable and interested for learners. Moreover, the merit of e-learning has been itemized for example. The study by Islam (2015) mentioned that e-learning improves students' academic performance through the content delivery system. Also, Songkram et al. (2015) stressed that e-learning improves learners' ability to coordinate, management skills, and opportunity. Likewise, Naresh and Reddy (2015) declared that lecturers' input increases the students' perception of learning as it becomes easier. In essence, e-Learning techniques are embodied the Google Suite for instruction and it offers a superfluity of chances for male and female learners to explore different options for learning.

Gender discrepancy has historically affected and has been held responsible for differences in learners' success in academia and career. On Gender and Google Classroom, many studies have projected a positive influence on gender and Google Classroom technologies in instruction. For example, Kang et al. (2011) studies pointed out the clear differences in the gender of learners while engaging in Google classroom in the technology of instruction. Also, the study by Enoch and Soker (2006) confirmed that male learners performed well in online instruction than other female counterparts. Also, Kim and Park (2012) stressed that learners' achievement level of female was greater than male when using the Google Classroom. On this note, Google classroom may sometimes be preferable for alternative or a supportive learning tactics.

Using Google tools has been confirmed to enhance learning and efficacy in these following disciplines on the school curriculum. For example, social studies (DiCicco, 2016), writing instruction (Sarah, 2017), English language (Muslimah, 2018), and Economics (Stavytskyi & Urazgaliyeva, 2018). Moreover, as pertinent, the study on Google Classroom, there is no study so, ever worked on Google Classroom and creative arts which this research focused on. Therefore, this study attempt to study the efficacy of the technology of learning as regards Google Classroom in the context of creative arts in Nigerian Secondary schools. An attempt on Google Classroom a technology of learning for the teaching of creative arts among the Nigerian Secondary schools is being looked into and the study as well enquired into gender influence on the learners' performance when taught with Google Classroom technology of instruction.

Research Hypotheses

These hypotheses were put forward to guide the study:

1. There is no significant difference in the mean performance score of learners taught using Google Classroom.
2. There is no significant difference in the mean performance of female and male learners taught using Google Classroom.

METHOD

The post-test and control group design of the quasi-experimental is used for this study. The study samples were 30 males and 31 females of second-year students of Junior Secondary Schools in Oyo State, Nigeria. This was based on these attributes: Schools in which creative arts were being taught for the last five years. Schools that have a creative arts studio. Existence of certified creative arts teacher. Schools with enough Computers and accessibilities to School Wi-Fi and School Net for both students and instructors. Also, uninterrupted power for all electronics. A test was administered on the students that were conversant with the use of technological devices for surfing the internet. The best 32 students were selected to serve under the experimental sect while 29 students randomly picked for the conventional sect in the same school.

The main instrument of study was the Creative Arts Courseware (CAC). The instrument was technologically based. It was adequately developed in line with the Junior Secondary School Creative Arts curriculum. The instrument was put together on the principles of Instructional Design of Morrison et al. (2007). This Morrison, Ross, and Kemp task was made up of nine stages starting with identifying instructional design and to the evaluation stage. The courseware was developed, having contacted related text, internet, and periodical by the educational technology, Computer scientist, and graphic artist. This courseware was put in place for the collective as well as individual usage of the Google classroom in the school and at home. The validation of the instrument was subjected to content and faced by experts in educational technology and computer. The test instrument was 50 items of multiple-choice in objective questions form with five options (A - E) from validated NECO junior secondary creative arts question from the last five years. Google Classroom Achievement Test (GCAT) and the solution to the test items. At the commencement of the study, the Experimental Procedure (EP), with the aim, purpose, and objectives guiding the study well stated and documented in the operational manual or guide which was provided for both the instructors and learners.

The experimental learners were invited to join the Google classroom as specified in the manual. Before the commencement of the study, the learner has been instructed to join the Google classroom via their Gmail account, web quests or Google Docs to reacts in any form of questions in a specified area. Having created a folder purposely to share learning content (treated topics) in the whole school. The instructor connected the learners in the classroom; given instructions on the topics followed by activities and assignment based on the treated topics for complete four weeks through writing on the wall in the classroom and by giving announcement in the class stream. The teacher uploads the share content and treated topics 80 minutes weekly and learners link to the Google classroom through their already given code as specified.

While the other sect was team-taught with the help of experienced Arts Teachers, both treatments lasted for four intensive lessons in four weeks. After the end of the fourth week of exposures, the two sects were given Google Classroom Test (GCT) as a post-test, supervised by the researcher and researcher assistance.

RESULTS

H_{01} : There is no significant difference in the mean performance score of learners taught using Google Classroom. In testing this given hypothesis, the t-test statistic is used, the mean scores of learners in both conventional and experimental group were compared. The result is in Table 1.

Table 1. T-test Comparisons of Conventional and Experimental Group taught Using Google Classroom

Variables	N	Mean	Standard Deviation	Df	t-value	p-value
Conventional	32	68.5	12.76	59	11.073	000
Experimental	29	37.9	8.04			

From table 1 the calculated F value of 11.073 is significant in that the significant value of 000 is lower than 0.05 alpha levels. The result implies that there is a significant difference between conventional and experimental treated learners. Therefore, the null hypothesis is not accepted.

H₀₂: There is no significant difference in the mean performance score of female and male learners taught with Google Classroom.

To test this second hypothesis, the t-test statistic was utilised to compare the mean scores of female and male learners. This is revealed in below Table 2.

Table 2. T-test Comparisons of Compare the Mean Scores of Female and Male Learners

Variables	N	Mean	Standard Deviation	Df	t-value	p-value
Male	31	69.42	11.45	59	1.3214	191
Female	30	65.40	11.91			

In Table 2 above, the calculated $t - (1.3214) = 191$ and p-value is higher than 0.05. The result implies that there is a significant difference in mean scores of both female and male creative arts learners exposed to Google Classroom, therefore the null hypothesis is accepted. To ascertain this the means of the female and male students were compared from Table 2, that of the male creative arts learners mean was 69.42 was higher than their female counterparts of 65.40.

DISCUSSION

Based on hypothesis 1, it was confirmed that there are differences between the conventional and experimental creative arts learners in terms of their mean performance scores. The finding conformed to the study of Iftakhar (2016) who reported that Google Classroom is easy to use and effective for the learning process. Also, the finding supports the conclusion of Wijaya (2016) who succumbed that e-learning is of benefit to students. Moreover, the finding is supported by the conclusion of Shahanee et al. (2016) whose studies proved that Google Classroom is positive for learning. Moreover, the finding is in support of the conclusion of Stavtyskyi and Urazgaliyeva (2018) who succumbed that Google Classroom is also positive in instruction delivery. Furthermore, findings also agreed with Sergeeva and Nikitina (2016) whose finding establishes that Google Classroom improves learning. Moreover, the finding agrees with Mafa (2018) who stated that Google Classroom improves learning outcomes

Also, the current findings are in line with the findings of Khalil (2018) who submitted that students significantly enjoyed the use of Google applications to their convenience and manageability. The findings corroborate with the finding of Alsubaie and Ashuraidah (2017) whose study proved that Google Docs is significantly positive for passing comments and feedback. In essence, the study is the same with the findings of Manso (2012) who confirmed that Docs is perceived in the usefulness of the collaborative tool in academicians and offers a more productive alternative through e-mail. However, the study contradicts the study of Abu Bakar and Noordin (2018) whose findings favoured the face to face classroom over the virtual learning

On the hypothesis 2 based on gender, it was confirmed that there are no differences between the female and male creative arts learners mean, in this regard, the hypothesis is accepted. The findings of this research agree with Selwyn (2007) who established that female learners were more friendly with online learning than male counterparts. Also, the findings agreed with Parviza and Gorjianb (2014) findings revealed the significant difference in Iranian females and males on the email usage. Likewise, the findings of Milkman et al. (2015) whose findings proved the Wikipedia established no proof of discrimination on female users. Also, this findings favoured Shane-Simpson and Gillespie-Lynch (2017) who affirmed that feminine markers help in bridging the gender gap on the use of Wikipedia. The finding in line with Antin et al. (2011) who uncovered that females and males measured differences in editing behavioural on the use of Wikipedia. In essence, the finding

contradicts the findings of Reay et al. (2008) whose findings confirmed the reduction in academic performance gap of male and female students studying physics with clickers. At the juncture where the Google Classroom is well developed and widely utilised for instruction, the rate of cognitive assimilation in the part of the learners is always rated very high.

CONCLUSIONS

The following were the conclusions derived from the findings. Google Classroom enhances creative art learners understanding of some creative arts concepts. It also increases skill acquisition of and aid their performance. On gender, female and male creative arts learners exposed to Google Classroom did not perform significantly.

RECOMMENDATION

The following recommendations arose from the study:

- Google Classroom can be encouraged to teaching creative arts.
- Educational technologists specialists could be encouraged in developing courseware for teaching of creative arts in Junior secondary school in Nigeria.
- School administrators and government representative should be advised to support both learners and teachers by providing the necessary infrastructure to access Google.

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