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The Nigerian Experiential Beauty and Ugliness of Technological Teaching: A Case of Google Classroom

L'expérimentale Nigériane De La Beauté Et La Laideur: Un Cas De Classroom De Google

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Abstract

Intriguingly, 21st century instructional process captivates instructors' attention. Meanwhile in reality it could be a myth. Happily, a Nigerian instructor creates a Techteaching experience hoping that learning would be affected. Disappointingly, students complain about the reality of the effectiveness of the Techteaching to meet learning objectives. Thus, instructors are dealt with a blow of the appalling fact of reverting to the traditional methods and settle for the conventional to effect learning at all expense. This article relates the experiences in two tech-based courses; Educational Games and Simulation (EGS); and Computer Science Methodology (CSM) over a semester in a Nigerian university. Google Classroom (GS) was employed as the learning platform for the two courses. A qualitative research approach was employed, while the sample size included conveniently sampled classes; EGS (8); and CSM (53). Content analysis was employed in analysing the data collected. The study found out

that Internet and technological resource dearth make it difficult for students to access and explore the learning resources in the GC. The beauty of the opportunity provided by the University to enjoy e-learning experience is quite impressive and rewarding. Apparently, the ugliness overshadows the beauty.

Keywords: *TechTeaching; Google Classroom; Technology Integration; Learning with Technology; Teaching with Technology.*

Resume

C'est intéressant de constater que le processus d'enseignement du 21^{e} siècle retient l'attention des enseignants. En réalité, il pourrait bien être un mythe. Heureusement, un enseignant nigérian crée une expérience de Techteaching en espérant que l'apprentissage en sera modifié. Malheureusement, les étudiants se plaignent de caractère inefficace du Techteaching pour réaliser les objectifs d'apprentissage. Ainsi, les enseignants sont confrontés à la réalité effroyable de revenir aux méthodes traditionnelles et de se contenter du conventionnel pour effectuer l'apprentissage à tout prix. Cet article présente les expériences de deux cours basés sur la technologie : Jeux et simulations éducatifs (EGS) et Méthodologie de l'informatique (CSM) pendant un trimestre dans une université nigériane. Google Classroom a été utilisé comme la plateforme d'apprentissage pour les deux cours. Une approche de recherche qualitative a été adoptée, tandis que la structure de l'échantillon comprenait des classes échantillonnées de manière appropriée : EGS (8) et CSM (53). L'analyse du contenu a été utilisé pour analyser les données recueillies. L'étude a révélé que le manque d'Internet et de ressources technologiques rend difficile pour les étudiants l'accès et l'exploration des ressources d'apprentissage dans le GC. La beauté de l'opportunité offerte par l'Université de profiter de l'expérience de l'apprentissage en ligne est assez impressionnante et gratifiante. Apparemment, la laideur éclipse la beauté.

Mots-clés: *TechTeaching; Classroom de Google; Intégration de la technologi ; Apprentissage à l'aide de la technologie ; Enseignement l'aide de la technologie.*

Introduction

The integration of technology for instructional purposes extends beyond the mere use of any available technological tool to teach, but requires instructors and learners to go extra length in ensuring effective learning. Evidence abounds on the overwhelming interest of instructors and learners on the haphazard adoption of instructional technology. Which of course, have continuously affect the expectations of instructors and achieving instructional objectives. Different factors could contribute to the haphazard use of instructional technology by enthusiasts, such may include issues of technological and infrastructural resource availability, users' competence, institutional support, and a host of others.

As a way of bridging this gap, educational institutions, particularly, University of Ilorin dedicated to improving and promoting lifelong learning services through the integration of emerging instructional technologies, provided e-learning opportunities for instructors and learners, and further supports them with require capacity building skills to use the platforms effectively. Among many other e-learning platforms adopted by the Institution is Google App for Education, GA*f*E, particularly Google Classroom, and capacity empowerment to upskill faculty members and students in the University was equally provided (Unilorin Bulletin 2016). Since the availability of this affordance in the institution, it becomes expedient to x-ray the experiences of faculty members and students regarding the benefits and ills of adopting this platform for their primary responsibilities. Thus, the purpose of qualitatively exploring the beneficiaries' assessment of the beauty and the ugliness of the experiences during the course of using Google Classroom.

The Google App for Education, GAfE

The GA*f*E covers a wide range of free and premium service applications provided by Google to facilitate instruction and interaction between or among teachers and students. Like the traditional Microsoft Office Suite, GA*f*E has similar functional Web and Mobile applications for instructional purposes, such as email services (Gmail), chat services (Hangouts), class scheduling (Google Calendar), cloud

storage (Google Drive), word processor (Google Docs), presentation creation (Google Slides), collaboration and community (Google Groups), Data processing and management (Google Sheets), blog (Google Sites), e-learning platform (Google Classroom) and a host of others, see Figure 1 below:.

Figure 1: Google for Education Products
Source: Google (2020)

The Google Classroom

Nagel (2014) emphasized that the launch of Google Classroom by Google in 2014 created a paradigm shift in how an instructional system is approached. As a Learning Management System (LMS), Google Classroom supplements or blend existing instructional process to achieve instructional goals. Researchers such as *Ainul and Zulaikha (2021) claimed that* Google Classroom is a satisfying LMS for blended learning because of its features, user-friendliness, and appropriateness in higher education programmes. Google Classroom is developed to create an exciting experience for both teachers and students to conduct classroom activities in a blended manner. As a Google product user, Google Classroom is relatively available to anyone to create, learn and collaborate either synchronously or asynchronously (Etherington, 2017).

With all the fantastic features and opportunities afforded by Google Classroom, it has gained a lot of reception, use and review across the

board. Some of the criticisms levied against it are: heavy integration of Google apps and services with limited or no support for external files or services, lack of automated quizzes and tests, and a lack of discussion forums or live chats that can aid in feedback efforts, data mining of students' browsing history, searches, and other usages of services for advertising, enabling the mass collection and storage of information on children without the consent of their parents.

Though some of these criticisms have been worked upon and improved upon by Google over the years as review comments are taken care of by the Google technical experts (Ressler, 2017). As fascinating as the idea of Google Classroom is, its wide reception (Ressler, 2017) and some of the criticism levied against it, challenges with regards to its actual use by end users have not been much recorded (Pappas, 2015). It is on this premise, that this study reports the experiences of both lecturers and students in two classes conducted with Google Classroom in University of Ilorin, Nigeria.

E-learning in University of Ilorin: The Introduction of Google Apps for Education

In taking a giant step towards embracing technology integration, the University of Ilorin constituted a strategic e-learning committee to strategize the launch of the institution's exploration into e-learning opportunities and affordances for staff and students. While the committee recognised the infancy nature of the University, rather than scaling largely, a pilot was encouraged as a start-up. Thus, signing a memorandum of understanding with Google, thereby adopting the University's e-learning on the GA*f*E, specifically the Google Classroom. Since then, onwards, faculties, departments and individuals have taken up the initiative to implement Google Classroom in their teaching activities (Unilorin Bulletin 2016). It is, therefore, imperative to understudy how the experience has fared since inception looking, at its good, bad and ugly, while considering the overall technological state of the University.

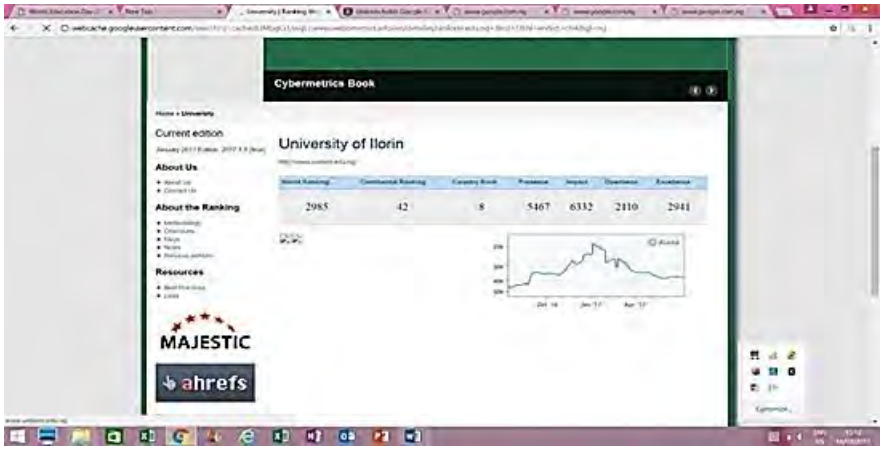

Figure 2: Internet Access and Speed Rate of University of Ilorin, Nigeria
Source: Webometrics (2020)

As shown in Figure 2, in the webometric index, University of Ilorin is rated as the 8th university in Nigeria with an Internet speed between 622 Mbps and 630 Mbps on the STM-4 fibre bandwidth.

Methodology

A qualitative research approach was employed, while the sample size included conveniently sampled intact classes of two different courses: Educational Games and Simulations; and Computer Science Education Methodology Course. The two courses titled were taught with Google Classroom in the harmattan semester 2016/2017 session. Ethical practices of data collection were ensured by informing the participants about the importance of the research; ensuring that their identity is regarded safe, and their permission was sought at every interval of the data administration. Generally, it took approximately a whole semester to complete the data collection. Content analysis was employed to analyse the collected data.

Results and Analysis

Data collected were analysed qualitatively using a content analysis approach. In Educational Games and Simulations, assignments were given as depicted in the screenshots below (see Figures 3, 4 and 5

respectively). In the first assignment, most of the students were excited to explore the App, implying that the use of digital resources or e-learning platform as Google Classroom stimulates their interest in learning. For example, as shown in Figure 6, one of the students submitted his assignment online. However, none of the students attempted the second and third assignments on the Educational Games and Simulation Google Classroom platform, but they submitted offline claiming not to have access to electricity off-campus and low internet speed.

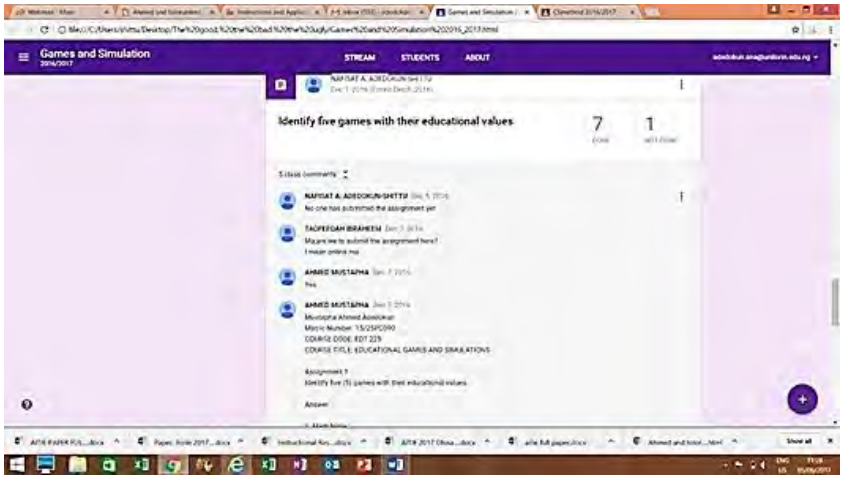

Figure 3: First Assignment

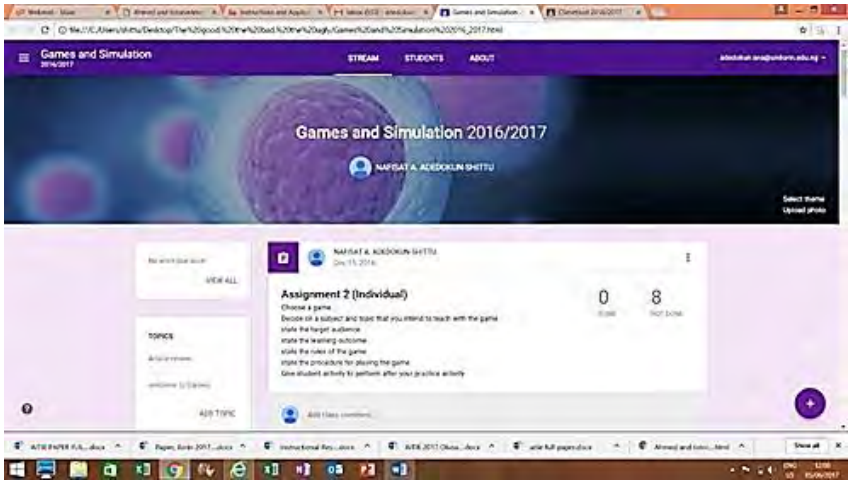

Figure 4: Second Assignment

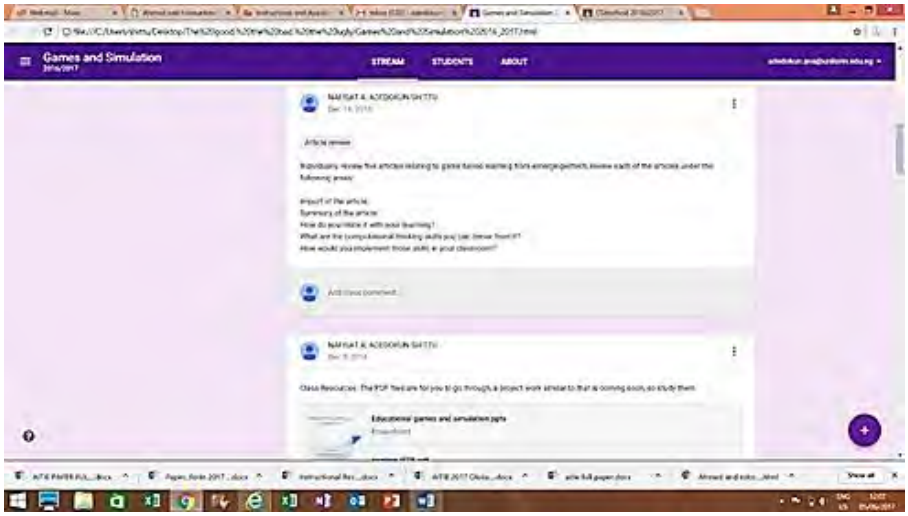

Figure 5: Third Assignment (Article review)

Figure 6: Assignment Submission of One of the Students

Furthermore, learning resources were uploaded (see Figure 7) for students to access for them to gain broader insights into the concept of educational games and simulation. Instructional files were easily accessed but not downloaded; complaining that downloading the files will usurp their self-sponsored Internet data. Thus, it will be economically draining to download the files with mobile data, since the university's WIFI was epileptic during the period. Hence, the students copied the files through their drives from the lecturer's laptop, submitted the articles offline, but accessed Google Classroom to get the review instructions.

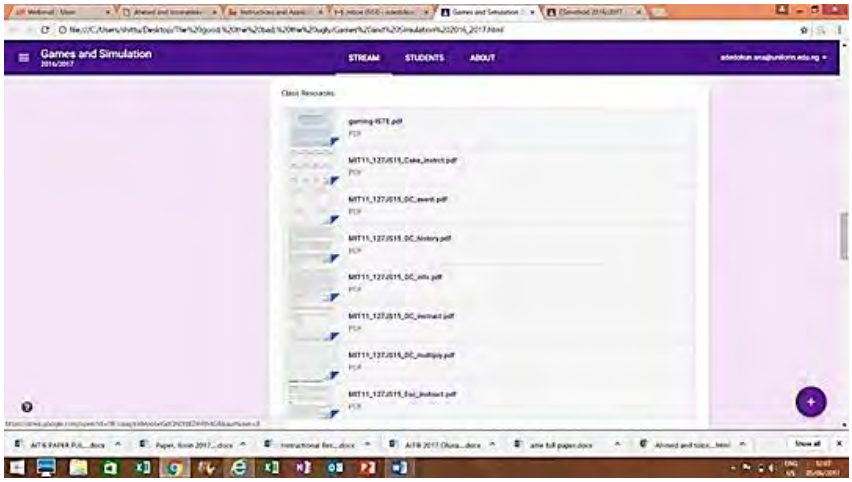

Figure 7: Class resources

As regards the second course, Computer Science Methodology, the activities in the course included students' personalised article reviews, as well as individual and group assignments. Figure 8 displays the announcement given regarding the group assignment with an attachment of the class lecture audio file.

Figure 8: Group Assignment Announcement

For the article review, just two students attempted the online submission while 40 others who joined the Google Classroom did not attempt it. Though, all 53 students registered for the course, while

others submitted their article review offline (Figure 9). Likewise, for the individual assignment, eight students responded on Google Classroom, while 38 did not (Figure 10). Resources for the course were also uploaded for students' access (Figure 11), but just a few students who accessed the Google Classroom shared with other students who could not access it because of excuses of internet access.

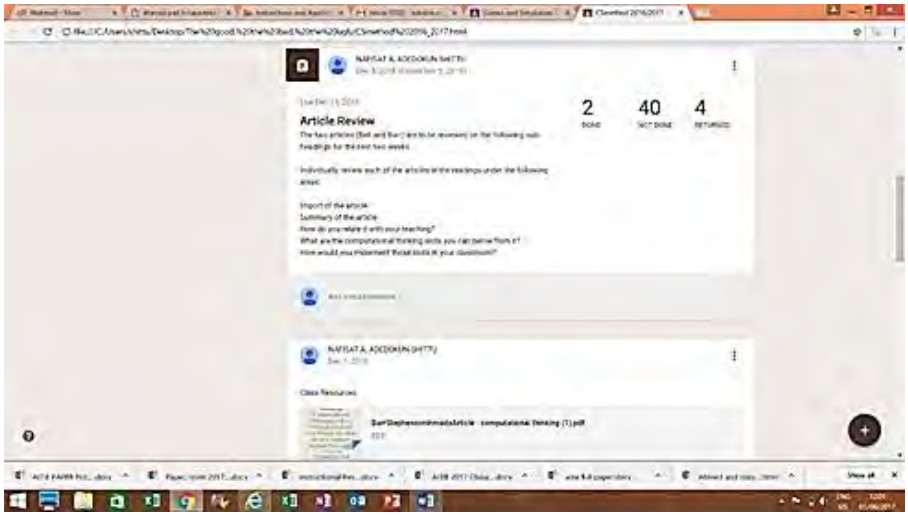

Figure 9: Article review (CSmethod)

Figure 10: Individual Assignment CS method

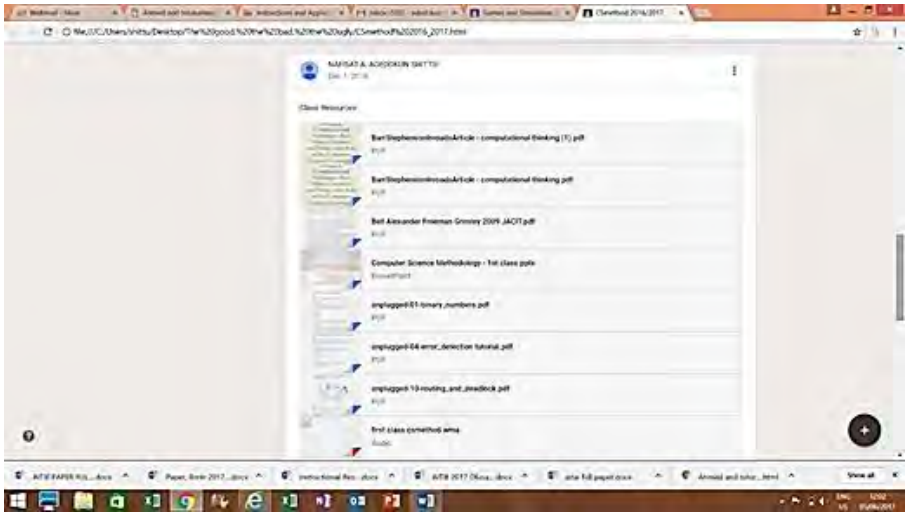

Figure 11: Class Resources CS method

Discussion: The Beauty and the Ugliness

In providing a clearer picture of the experiences of the students in both classes, a product assessment sheet was given to each student. Each assessment sheet was categorised into three component analyses: the good, the bad and the ugly. The exciting experiences constituted the good; the bad, however, comprised when some reality sets in and turns the situation into an intolerable experience; and the ugly comprised the period when students and lecturers had to abandon the technological approach and were forced to embrace the traditional system.

Among many other experiences shared, one of the students in Method course, A1 expressed his views regarding the GOOD thus: "*The good I would like to mention in this section about the course is the integration of several technological processes to the class, despite the absence of devices for undertaking it, but we have been able to improvise to an extent and that, has aided my knowledge of improvisation."* From his submission of the good, he also hinted the bad and further explained what constituted the bad in his later submission that: "*though this course on its own is a wonderful experience for prospective teachers like myself, but I stand at the losing end due to the poor internet connection and me not possessing a personal computer." Sometimes, I have to leave the comfort of my*

house to sleep at my friend's house in order to see through the materials of the course. An African proverb says ''nothing good is free from having some component which is bad."

A1 further dovetailed into the ugly of the experience when he said: *"CS method is one of the best courses I have ever been engaged in, but the ugly in this path is poor electricity supply. To an extent, this poor electricity has limited us late fulfilment of some objectives of the course. As we have been taught in every class that as teachers, we should give no excuse but just find a way out to get it done. These materials are key to the fulfilment of this course yet because I do not have them, it is at a level difficult for me to fulfil these requirements.' The course 'Method course' is very important for every prospective teacher as it opens them to opportunities even on how to integrate ICTs, improvise and deliver the objectives of the course to the learners."*

Another student B1 from the other course "Games and simulation" expressed his excitement (the good) thus: "*the class opened up the actual way of how educational technology facilitates learning and improves performance, it gave me an insight on how to prepare several educational games, cartoons, videos, music, it helps to know about learners of the present age their characteristics and of course how they learn best, there was good classroom management and communication between the lecturer and students, the class is always fun and students' opinion is allowed.* The bad experience he had was captured thus: "*we were not able to practice some of the software mentioned earlier in class properly, course requirements and activities scared a lot of students away".* He recounted the ugly part as: "*project work can be technical for students that know less about software, limited time for class activities, internet and electricity needed for the course which are not always available."*

Conclusion and Implication

Outcomes of the content analysis done on the assessments received from the respondents revealed that the most recurring challenge identified across the assessment was insufficient Internet access and epileptic electricity to charge devices to access resources. The dearth

of Internet, electricity and digital resource made it unbearingly difficult for students to access, attempt and submit assignments on the Google Classroom platform. Consequently, it will be unfair for Faculty members to assess students based on their online presence and participation in the Google Classroom.

Overall, the beauty of the opportunity provided by the University to enjoy the e-learning experience is quite impressive and rewarding. Apparently, the ugliness overshadows the beauty. The University's effort at ensuring a digitally-driven institution is slowly manifesting with efforts of a few staff and students tapping the opportunities and benefitting therefrom. Though, if further motivation, in terms of facility upgrade and upskilling capabilities is not provided, the bad and the ugly situations may mare the good.

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