ASSESSMENT OF LEARNING ENGAGEMENT AMONG SENIOR SECONDARY SCHOOL STUDENTS DURING ONLINE LEARNING PROGRAMS IN RIVERS STATE

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ABSTRACT

Presently, due to worldwide pandemic (COVID 19 pandemic), teaching and learning have been moved from the traditional face-face classroom teaching and learning environment to an online teaching and learning environment. Though not prepared for this situation, teachers are struggling to make the best out of this situation by engaging themselves and their students actively in online learning programs. Therefore this study was motivated by the need to find out: the level of engagement among students during their online learning programs particularly, among senior secondary school students. A survey design approach was used in this study to gather relevant information among senior secondary school students in Rivers State through a duly valid and reliable instrument (r = 0.85). Findings revealed that there was a low level of learning engagement among male and students, with the majority of the students faced with learning engagement challenges like distractions from siblings, isolation from peers, no access to reliable internet connection among others. The study recommends that audio-visual aids should be used to teach students online to improve the learning environment and create a connection between the teachers and students, thereby improving the learning engagement of students during their online learning engagement.

INTRODUCTION

The worldwide COVID 19 pandemic has created a massive disruption in all sphere of human endeavour including the educational system. Like most other professionals, teachers and students have been forced to find alternative ways of teaching and learning which have resulted in a sudden change from the traditional face-to-face classroom teaching and learning environment to an online teaching and learning environment. While researchers have shown that online learning can be as effective as face-to-face learning, it is also known that the move to online learning possesses significant to students who might not have experienced such manner of instruction. (Robertson, Grant & Jackson, 2005; Zhoa, Lei, Lai & Tan,2005). One area this is likely to impact on students is learning engagement.

Learning engagement refers to the degree of attention, curiosity, interest, optimism and passion of students in the school or outside the school towards their education at all levels. These also extend to the level of motivation and progress these students show in the totality of the learning process. The need for engagement has resulted in the development of guidelines for designing learning experiences including effective online courses (Roblyer & Ekhaml, 2000). Learning engagement shows the quality and quantity of the participation of the learner on their education. An engaged learner is active in learning, very eager to participate in class activities, inspired, motivated and willing to put more effort into the learning process than one who is not engaged.

For teachers, providing learning engagement involves keeping students motivated, giving them the tools that they need to learn, and fostering a sense of pride in achieving personal learning goals. It's about encouraging learning for the pure love of it, not just for the sake of getting grades. To boost student engagement, three basic engagement techniques of online learning have been identified: student-content, student instructor, and student-student (Bernard et al., 2009). As regards online learning, Lear, Ansorge, and Steckelberg (2010) further opined that interactions with content, peers, and instructors help online learners become active and more engaged in their courses. Interactivity and sense of community result in high-quality instruction and more effective learning outcomes. When learners are working hard to absorb the material the course offers, and they are committed to learning that comes without reward other than the learning itself, this is indicative of their being engaged. Engagement requires an emotional connection between the content and learner. And the only way we can do that is by knowing what drives people to spend time, effort, and energy learning educational content.

Online learning is the result of the development of network technology and computer technology, which emphasizes the access and utilization of learning resources and communication among students. Online learning has become the mainstream of learning with a large number of learners involved in it using internet resources. The internet has become a medium of delivery for online learning. To date, online learning has received considerable attention as a means of providing alternatives to traditional face-to-face, instructor-led education (Douglas & Van Der Vyver, 2004). The essence of online learning is the continuous development of students' cognitive level. Furthermore, to acquire effective learning, students need to participate actively in the learning process. However, due to the lack of communication between teachers and students, the performance of students who participate in online learning is not satisfactory, and their persistence and efficiency are also not encouraging.

PURPOSE OF THE STUDY
The purpose of this study was to assess the learning engagement of secondary school students during online learning experiences in Rivers State.
Specifically, the objectives of this study include:
1. To assess the level of online learning engagement among male and female secondary school students in Obio-Akpor Local Government Area of Rivers State.
2. To determine the challenges of online learning engagement among male and female secondary school students in Obio-Akpor Local Government Area of Rivers State.
3. To ascertain the strategies for improving the online learning engagement among male and female secondary school students in Obio-Akpor Local Government Area of Rivers State.

RESEARCH QUESTIONS
The following research questions were developed to guide the study.
1. What is the level of online learning engagement among male and female secondary school students in Obio-Akpor Local Government Area of Rivers State?
2. What are the challenges of online learning engagement among male and female secondary school students in Obio-Akpor Local Government Area of Rivers State?
3. What are the strategies for improving online learning engagement among male and female secondary school students in Obio-Akpor Local Government Area of Rivers State?

HYPOTHESIS
The underlisted hypothesis was tested at 0.05 level of significance to further aid in guiding the study
1. There is no significant difference between male and female students' learning engagement during online learning.

METHODOLOGY
A survey design approach was used in this study to gather relevant information from senior secondary school students in Rivers State. The multi-stage sampling technique was adopted. Firstly, a purposive sampling technique was used to select two local government areas, Obio-Akpor and Port Harcourt City, in Rivers State, based on the reason that out of the local government areas in rivers state, only private senior secondary schools in these areas were engaged in

online learning programs. 10 senior secondary schools were randomly selected from the two local government areas.

Data was gathered online using a duly validated Online Learning Engagement Questionnaire (OLEQ). The instrument was constructed on a four-point rating scale of Strongly Disagree (SD), Disagree (D), Agree (A), and Strongly Disagreed (SD). The instrument was further divided into three sections in line with the three research questions guiding the study. Prior to the deployment of the online test to the students, face and content validity of the instruments were ascertained by research experts in Faculty of Education, Ignatius Ajuru University of Education. Upon the initial assessment of the instrument, it was shown that some items needed to be modified to aid better understanding among the students. The reliability of the instrument was established using Cronbach alpha reliability technique, which yielded an internal consistency value of 0.85. This, therefore, indicates that the instrument possessed a suitable level of reliability and can be used for the purpose of data collection

For data collection, the instrument was deployed to 210 students whose schools were involved in online learning during the period of the pandemic. However, only 120 responses that were accurately completed were obtained. From the response obtained, it was shown that the respondents included 42 SS I students, 32 SS II students and 46 SS III students were used for the study. Out of the 120 responses of the questionnaire returned, 65 students were male while 55 students were female.

RESULT AND PRESENTATION
Research Question One: What is the level of online learning engagement among male and female secondary school students in Obio-Akpor Local Government Area of Rivers State?

Hypothesis One: There is no significant difference between male and female students' learning engagement during online learning.

Table 1: Gender differences in the level of online learning engagement among male and female students

Gender	N	Mean	SD	df	t	p	Decision
Male	65	2.16	0.97	118	0.501	0.616	Retain H_{o1} $p>0.05$
Female	55	2.07	0.99				

From the analysis of data shown in Table 1, it can be observed that male students had a mean value of 2.16 (SD = 0.97), while female students had a mean value of 2.07 (SD = 0.99). Based on the obtained mean values of male and female students, it can be observed that male students had a higher level of online learning engagement more than female students. However, since the mean values for both male and female students were lesser than 2.50, it, therefore, indicates that there

is a low level of online learning engagement among secondary school students in Obio-Akpor Local Government Area of Rivers State.

Research Question Two: What are the challenges of online learning engagement among male and female secondary school students in Obio-Akpor Local Government Area of Rivers State?

Table 2: Challenges of learning engagement on students during online learning programs in Rivers State.

S/N	Statement	SD%	D%	A%	SA%
1.	I cannot connect to online learning punctually due to poor network.	10%	30%	35%	25%
2.	I do not find online learning helpful.	15%	30%	20%	35%
3.	I do not participate fully during online learning programs	20%	20%	35%	25%
4.	I have no android phone for learning.	10%	30%	30%	30%
5.	I don't have reliable internet network.	10%	30%	30%	30%
6.	I feel isolated from my peers.	15%	25%	30%	30%
7.	I am always distracted by my siblings while learning online from home.	30%	20%	25%	25%
8.	I prefer playing online games with my phone to online learning.	5%	35%	40%	20%
9.	I am not familiar with online learning software like Google classroom.	55	45%	30%	20%
10.	I miss interacting with my teachers.	15%	30%	40%	15%

Table 2 shows results on challenges of learning engagement on students during their online learning programs. The table shows that more than 50% of the students are faced with challenges such as not being able to connect to their online learning programs on time due to poor network, no reliable internet connection, isolation from peers, distractions from siblings, no access to android phones, not familiar with software like Google classroom e.t.c. Furthermore, the study also shows that 55% of the students miss one on one interaction with their teachers.

Research Question Three: What are the strategies for improving online learning engagement among male and female secondary school students in Obio-Akpor Local Government Area of Rivers State?

Table 3: Strategies for improving learning engagement.

S/N	Statement	SD%	D%	A%	SA%
1.	Audiovisual aids should be used for teaching students online for them to feel the presence of their teachers.	5%	30%	40%	25%
2.	Teachers should send e-mails to students discussing their progress on the program.	15%	30%	25%	30%
3.	Parents and students should be given an orientation on what to expect during online learning programs so as to prepare and educate them on the software and online conduct.	10%	30%	30%	30%
4.	Radio and television programs should be organized by schools to accommodate students who do not have access to android phones.	10%	35%	20%	35%
5.	Online group activities should be organized to encourage interaction among students.	15%	25%	40%	20%

Table 3 shows results on the strategies for improving learning engagement among senior secondary school students during their online learning programs in Rivers State. 65% of the students agreed that audiovisual aids should be used for teaching students online to enable the students to feel the presence of their teacher. This increases their motivation and improves their online learning angagement.55% 0f the students agreed that teachers should send e-mails to students discussing their progress on the program. 60% of the students agreed that orientation should be given to both parents and students educating them on what to expect during the online learning programs and the software they are going to use for the online learning programs.55% of the students agreed that radio and television programs should be organized so that students who do not have access to android phones will key into it. 60% of the students agreed that students should be grouped from time to time to perform some tasks online to encourage interaction among them.

DISCUSSION

From the analyses carried out above, it was discovered that while males reported a higher level of learning engagement than female students, both gender

had a low level of learning engagement as regards online learning. The study also found out that students learning engagement were faced with challenges like isolation, lack of motivation, no access to a reliable network, no access to android phones, distractions from siblings, lack of self-discipline in handling and using android phones among others. The students agreed that the strategies presented by the researcher for improving learning engagement among senior secondary school students during online learning programs in Rivers State.

The result of this study is similar to previous research and observations by scholars. According to Gutierrez (2014), students' problem regarding online learning revolves around the lack of personal interactions between instructor and students, as well as a high level of distraction due to isolation. Similar findings were reported by Gillett-Swan (2017) who reported a high level of poor technological competencies among students and teachers as a major bane of online learning among students in Australia.

RECOMMENDATIONS

Arising from the findings presented in the study, the following suggestions and recommendations are made to improve the learning engagement of senior secondary school students during their online learning programs;

2. Audiovisual aids should be used for teaching to enable the students to see and hear the teachers while learning. This will make the teaching and learning process real for the students, create a connection between the teachers and the students and also improve the learning environment.
3. Teachers should create time for a one-on-one discussion with students through e-mails and WhatsApp chats, discussing their progress in their online learning programs.
4. Parents and students should be given adequate orientation at the beginning of the program to educate them on the need to give their children some privacy while their lessons are on to enable them to concentrate and participate actively in the program and also avoid distractions from siblings and other members of the household, as well as the software to be used for the program for easy access.
5. Finally, reward programmes that promote discipline among students need to be developed. This is likely to minimize instances of distraction among the students.

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