

## Effectiveness of Visual Video Tutoring on Students' Learning in Coping with Covid-19 in the New Normal

OSEGBUE GLORIA .C (Ph.D)  
Department of Educational Foundations  
Chukwuemeka Odumegwu Ojukwu University, Faculty of Education  
Igbariam Campus  
E-mail: gloriachineze@gmail.com

### Abstract

The study examined the extent of effectiveness of Visual Video Tutoring on student' learning in coping with COVID-19 pandemic. The design of the study was descriptive survey and the area of the study was Anambra State, Nigeria. The sample of the study comprised 30 teachers in three selected private schools in Onitsha education zone. The instrument for data collection was structured questionnaire on the effectiveness of visual video tutoring on students learning. One research question and a null hypothesis guided the study. The instrument was validated by three experts and the reliability was established using Cronbach Alpha Co-efficient, which yielded an index of 0.85. Data collected was analysed using mean and standard deviation, while the null hypothesis was tested using t-test statistics at 0.05 level of significance. The major findings of the study indicated that teachers in private secondary schools, to a high extent viewed that Visual Video Tutoring (VVT) is effective for students' learning. The study recommends that since private schools have successfully used VVT to help students cope and learn, the Government and school administrators in public secondary schools should key into the use of any multimedia platforms to keep the students busy in the face of hazardous situations like pandemic and current security challenges in the country particularly in Anambra State, where students have been compelled to sit at home on Mondays for almost a year, for fear of being attacked by some pressure groups in the state.

**Keywords:** COVID-19, E-learning, Visual Video Tutoring

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### Introduction

Going to school is the best public policy tool available to raise skills. Osegbue in Osegbue and Nnubia (2020) opined that secondary education is important primarily because it is the level that students interface with more technology and life expectations. But regrettably, COVID-19 has caused series of treats and challenges to every sector of the economy (education inclusive). The pandemic has interrupted teaching and learning process especially in most public institutions of learning in the world. Many nations, organizations, and individuals are still telling their experiences. COVID-19 pandemic is a health crisis that has devastated most countries of the world. COVID-19 is very dangerous to life because it attacks respiratory tract causing a single-stranded Ribonucleic Acid (RNA) virus belonging to the Coronaviridae Family. Its mood of transmission is mainly through close contact with an infected person's mucus membrane secretions from the nose, mouth, eyes as well as contaminated surfaces, and air droplets (Zhang, et al. 2020). Lochner (2020) opined that Corona Virus Disease known as COVID-19, is a global problem which has killed thousands of people in China, Italy, Spain, United Kingdom, United State of America, and other countries around the world (Nigeria inclusive).

Azzi-Huck and Shmis (2020) observed that by the end of February 2020, an alarm has begun to sound on the spread of COVID-19 virus. They emphasised that the World Bank has established a multi-sectoral global task force to support counties respond and cope with the spread of the virus. In their study, Azzi-Huck and Shmis (2020) maintained that by middle of March 2020 over 120 counties of the world have closed schools, impacting almost a billion students across the globe, the impact which is still felt till date.

Effort to stem the spread of the virus, prompted most countries to devise strategies of managing the spread of the virus while the cure is still a mirage. World Health Organization (2020) advised most counties around the globe, to maintain frequent washing of hands, use of hand sanitizers, wearing of face mask, maintaining social and physical distancing, closure of public institutions (educational institutions inclusive) and finally lockdown rules to ensure safety of citizens. Additionally, UNESCO (2020) recommended the use of distance learning programmes, open educational applications and platforms by schools and teachers to reach learners remotely through the integrated digital learning platforms, video lessons, broadcast such as radio and television and other electronic technologies which could also be referred to as e-learning. This act prompted the government, school administrators, parents and all stakeholders in education, to seek ways of keeping students busy at home while ensuring that learning process wasn't halted abruptly for attainment of educational goals. This stemmed the birth of rush for e-learning by most schools in Nigeria particularly private schools, and alternative classroom broadcast on public television and radio stations.

Online learning (e-learning) was seen as a critical lifeline for education, as institutions sort to minimize the potential for community transmission. E-learning mean all the technological means through which teaching and learning can be delivered using electronic means. Murphy and Wyness (2020) asserted that effective use of e-learning media lies in the ability to operate the tool and access to the media outfit. Abiagun (2019) defined e-learning as the use of soft copies of textbooks to access information. This technology, enabled teachers and students to access specialized materials in multiple formats that can bridge time and space. He further reported that some privately-owned institutions, made use of various online tools to reach out to their students; Edmodo, Zoom, Google Classroom, WhatsApp and offline teaching through, CD-ROM, motion picture reprographic media, microfilm, voice mail the computer multimedia systems, among which is Visual Video Tutoring.

Visual Video Tutoring (VVT) is a method of given out instructions to students by recording the teachers lesson and sending the video tapes to students at home. Videos encourages multi-sensory learning because they can involve text, moving images, and sound. Lessons are taught by the class teachers themselves. VVT uses multiple senses which allow learners to make more cognitive connections. It encourages them to understand concepts better and think deeply because they are free from classroom distractions. Designing Digitally (2020) opined that use of VVT encourages micro-learning. Micro-learning is a popular format of learning where learning experiences are presented in shorter segments and to point.

This study described VVT as a form of video conferencing tool that allows the teacher teach her lesson and enables students watch the teacher teach, while still maintaining social distancing. Visual video tutoring gives the student opportunity to receive direct instruction from the teacher on video tape. They hear the teacher speak, follow the teacher's instructions and gets to watch the examples especially in practical subjects and this makes learning easy and interesting. In an interview Ezinine observed that there are challenges faced by teachers in using VVT such as the students not being able to ask direct questions and get immediate daily feedback, parents not picking the video tapes on time, different time of submission of assignments and cost (Ezinine, R.U. personal communication, January 12, 2022). She however maintained that parents are happy using this media, as it allows them attend to their school work and assessments, without interrupting students learning, since students are kept busy at home despite the pandemic. Similarly, Burgess and Sievertsen (2020) posited that the impact of COVID-19 is so severe for disadvantaged children and their families who do not have internet facilities or smart phones. In line with this view, Lavy (2015) asserted that in time of uncertainty and crisis, the most devastating countries are those with already low learning outcomes, high dropout rates and low resilience to shocks.

Assessment for students' learning is an on-going process of gathering and interpreting evidence about students learning for the purpose of determining where students are in their learning, where they need to go and how best to get there. Hence the need for on-line teaching and assessment of students' progress. Online teaching and learning, involves the act of being creative in packaging instructional materials to the pleasure and understanding of the learner. This study sees online teaching and learning as the process of achieving educational success through multi-media platforms. The need for e-learning during this COVID-19 pandemic, is to prevent interruption in students' learning; disruptions in internal assessments or their replacement by an inferior alternative. This view is in line with Burgess and Sievertsen (2020) who observed that most students have experienced major teaching interruptions in the final part of their studies and assessments and are likely to graduate at the beginning of a major global recession.

Basically, this is a wakeup call for Nigerian educational administrators, policymakers and stakeholders, to use this COVID-19 crisis period as an opportunity to introduce new learning platforms that can reach everyone, promote sustainable teaching and learning programme and makes educational system more resilient.

### **Statement of the Problem**

COVID-19 pandemic has affected education system in most states in Nigeria (Anambra State inclusive) leading to near total closure of primary, secondary and tertiary institutions. This led to the emergence of a lot of trial and error online and multimedia teaching and learning process. However, most parents, teachers and school administrators have complained of poor academic performance of students in both internal and external examinations, and students' absenteeism to school due to fear of contacting COVID-19 virus. This prompted most school administrators particularly private school owners, to embark on some form of e-learning media or other forms of out of school tutoring, in order to keep students abreast with current global educational measure taking by other developed nations of the world to cope with the pandemic. More so, there has been series of complaints from parents on lack of power supply to recharge phones, unavailability of data, unavailability of internet services, regular network interruption, poor network connectivity, high cost of data for internet services, poor lesson instruction, students not being able to ask questions, and a host of other challenges. Can it be that these challenges are as a result of the media format used by the schools or parents' unwillingness to embrace modern innovative practices needed to address current global health challenges? This study therefore sought to examine the extent of effectiveness of Visual Video Tutoring (VVT) on students learning in coping with COVID-19 pandemic in Anambra State.

### Purpose of the Study

The purpose of this study was to examine the extent of effectiveness of visual video tutoring on students' learning in coping with COVID-19 pandemic in Anambra State. Specifically, the study sought to:  
 Examine the extent to which Visual Video tutoring is effective on students' learning in private secondary schools in Anambra State.

### Research Question

The following research question guided the study:  
 To what extent is Visual Video tutoring effective on students' learning in private secondary schools in Anambra State?

### Hypothesis

There is no significant difference between the mean ratings of male and female teachers on the extent to which visual video tutoring is effective on students' learning in private secondary schools in Anambra State.

### Methodology

Descriptive survey research design was adopted in this study. This study was carried out in Anambra State, Nigeria. Descriptive survey research is deemed appropriate in that it is aimed at collecting data and describing in a systematic manner, the characteristics, features or facts about a given population (Nworgu, 2015). Multi-stage procedure was employed in this study. In stage one, simple random sampling technique was used to select one zone out of the six education zones. In stage two, one Local Government Area (LGA) was selected from the three LGAs in Onitsha education zone. In stage three, one private secondary school was selected from each LGAs and three schools were selected and used for the study. Ten teachers were selected disproportionately from each of the private secondary school making a total of 30 teachers (9 males and 21 female) were used as sample for the study.

A 13-item well-structured questionnaire titled "Effectiveness of Visual Video Tutoring on Students' Learning Questionnaire (VVTSLQ)" was used for data collection. The instrument was face validated by three experts, two in Educational Foundations Department and one in Measurement and Evaluation all from Faculty of Education, Chukwuemeka Odumegwu Ojukwu University. The reliability of the instrument was determined using Cronbach Alpha Coefficient which yielded an index of 0.83. The data were analysed using mean and standard deviation to answer the research question, while the null hypothesis was tested using t-test statistics at 0.05 level of significance. A Four-point rating scale of Very High Extent (VHE) (4-points), High Extent (HE) (3-points), Low Extent (LE) (2-points), and Very Low Extent (VLE) (1-point) was used for the study. The decision rule was to consider as High Extent mean score of 2.50 and above and Low Extent when less than 2.50. The null hypothesis was rejected if t-cal is more than the t-crit otherwise accepted.

### Results

**Research Question:** To what extent is Visual Video tutoring effective on students' learning in private secondary schools in Anambra State?

**Table 1:** Mean ratings of the extent to which visual video tutoring is effective on students' learning in private secondary schools in Anambra State.

S/N	Item Description	X Female	SD =21	Dec	X Male	SD = 9	Dec
1	Teacher enjoy using visual video tutoring method	3.50	0.65	HE	3.65	0.62	HE
2	All assignments given are completely filled and returned	3.75	0.44	VHE	3.95	0.30	VHE
3	Assignments are submitted on the stipulated date	3.42	0.47	HE	3.30	0.67	HE
4	Teacher can identify slow learners from their assignment records	2.43	1.04	LE	2.20	0.78	LE
5	Visual video tutoring can effectively be used to replace normal classroom instruction	2.20	1.20	LE	2.40	1.05	LE
6	The use of technology (VVT) is expensive	3.30	0.49	HE	3.25	0.69	HE
7	Students get immediate daily feedback with the use of VVT	2.42	1.03	LE	2.30	1.19	LE
8	Teacher sees VVT as effective complements to normal classroom instruction	3.17	0.48	HE	3.50	0.65	HE
9	Teacher covers as much content using VVT as during normal classroom situation.	3.50	0.65	HE	3.53	0.64	HE
10	Teacher prefer VVT to normal teacher/student interaction in the classroom	2.40	1.05	LE	2.40	1.05	LE

S/N	Item Description	X Female	SD =21	Dec LE	X Male	SD =9	Dec LE
11	teach practical lesson using the VVT platform effectively	2.02	1.30	LE	2.00	1.31	LE
12	Assessments are easy to construct using VVT	2.49	1.00	LE	2.40	1.05	LE
13	Parents said that they prefer the VVT method to other e-learning methods because it is cheaper	3.32	0.70	HE	3.50	0.65	HE
	Grand mean	2.92	0.81	HE	2.95	0.82	HE

Data on table 1 shows that item 1,2,3,6,8,9 and 13 have mean scores that are greater than the criterion mean of 2.50 already established. This indicates that private secondary school teachers to a high extent see VVT as effective for students learning in secondary schools in Anambra State. However, item 4,5, 7,10, and 12 are not so effective.

**Table 2:** Shows t-test summary reviewing the difference in the responses of male and female teachers on extent to which VVT is effective on students' learning in private secondary schools in Anambra State.

Category of teacher	No of Respondents	X	SD	O	Degree of Freedom	t-cal	t-crit	Decision
Male Teachers	9	2.92	0.81	0.05	28	0.53	1.96	Accepted
Female Teachers	21	2.95	0.82					

Based on the result on table 2, the calculated value of 0.53 is less than t-critical value of 1.96 at 0.05 level of significance. This means that the null hypothesis is accepted and the alternative rejected. The implication is that both male and female teachers viewed the effectiveness of VVT on student learning in Anambra State as not being significant.

## Discussion

The result from the analyses of data on table one shows that visual video tutoring (VVT) is an effective means of covering learning content, given assignment and keeping the students busy during this COVID-19 pandemic. The study revealed that parents and teachers like the use of VVT, in that students can continue to learn at home even after they have gone to their workplace with their smart phones since learning is via video tapes. Teachers see the use of VVT as an effective complement but not a replacement for normal classroom instruction. This implied that, as much as VVT is a welcomed innovation in teaching practice, it cannot completely replace classroom teaching and learning. This view is in line with the contentions of Onyema (2020) who maintained that technology has the potential to facilitate education from any location including the home but not to replace normal teaching and learning situation. Thus, as the world is struggling to contain COVID-19 or any other pandemic, the use of educational technology platforms would become the new reality (normal) for educational institutions, educators and learners as a complementary learning practice outside the classroom. At this time, parents would be required to act as intermediaries between the school management and the students in learning delivery. They would need to take on the role of a teacher by home schooling, guiding and helping their children under the guidance of the school. This study also revealed that teachers are able to cover a wide content area since they are not interrupted by the students during lesson delivery. The study also revealed that parents are well involved in the students' assignments since they are the ones that pick up the assignments and return them. Unlike formally, when some students return their assignments undone even after weekend break.

On the contrary, the study revealed that use of VVT was not very effective for teachers to identify slow learners. This is because since the assignments are done by the students at home, it could possibly be done by adult members of the family. Similarly, practical lessons (laboratory experiments) which ought to be carried out by students under the watchful eyes of the teacher, is hardly ever conducted using the VVT platform. The study also revealed that the use of technology (VVT) is expensive due to the fact the video tapes are used and the schools need constant power supply during the recording and production of tutorials. This view is in line with Holcombe (2020) who opined that school closure carries high economic and social costs for people across communities, and maintained that the impact is much on vulnerable and marginalized boys and girls and their parents who cannot afford to pay so much. More so, the study revealed that test construction for student's quiz are not easy since it involves careful selection of test items that involves objective answers. The teachers however noted that adequate training would help them catch up with the use of technology so as to keep abreast with the innovations in teaching practices. They further observed that the use of multi-media tools is a welcomed innovative practice which would help schools cope with crisis situations like this COVID-19 pandemic period.

The result of hypothesis testing revealed that there is really no marked difference between the responses of male and female teachers on the extent of effectiveness of the use of VVT on students' Learning. The implication of the null hypothesis is that visual video tutoring is an effective way of ensuring students' learning even in this era of COVID-19 pandemic.

## Conclusion

School closure in response to the COVID-19 pandemic has shed light on numerous issues affecting access to education as well as socio-economic issues. The interruption and closure of schools has affected people across communities, but their impact is more severe on the students in government schools and institutions who have to wait on the government to take appropriate action unlike their private counterpart. Due to the COVID-19 pandemic, administrators of most private schools have begun conducting classes via different multi-media platforms to ensure sustainability of education. Based on the findings of the study, it was concluded that visual video tutoring is a reliable and valid technological assisted instructional approach for effective instructional delivery in secondary schools in Anambra State amidst COVID-19 pandemic. This is a wake-up call for public schools to do same for educational sustainability.

## Recommendations

Based on the findings, the following recommendations were made:

1. The Government in conjunction with the school authority should provide the needed technological facilities such as smart boards, computers, projectors, internet connectivity, alternative power supply, workshops, capacity development programmes that can enhance smooth and effective instructional delivery.
2. The school administrators should provide an e-learning library which should be assessable by teachers and students for effective and efficient instructional delivery.

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