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## EXPLORING THE ACCEPTANCE OF INSTRUCTIONAL VIDEOS TO BRIDGE KNOWLEDGE GAPS IN PHYSICAL GEOGRAPHY AMONG SENIOR SECONDARY SCHOOL STUDENTS IN OYO STATE NIGERIA

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### Abstract

The integration of videos in the instructional process has become increasingly prevalent, offering a dynamic approach to enhancing students' learning experiences. Specifically, this study focuses on factors influencing the acceptance of instructional videos, emphasising internet self-efficacy and access to mobile/digital devices as critical variables. While previous studies have examined the effectiveness of video in students' learning outcomes in geography, this research fills a gap by investigating its acceptance, with a view to harnessing the potential of instructional videos for a more immersive learning experience in physical geography classrooms. The study adopted a descriptive survey research design. The participants comprised 302 students randomly selected across six senior secondary schools in all three senatorial districts in Oyo State, Nigeria. The results showed that the level of acceptance of instructional videos and internet self-efficacy among senior secondary school students were high with weighted averages of 3.0 and 2.8 respectively, suggesting reasonable dispositions to accept and utilise these learning resources to facilitate learning. The Analysis of Variance (ANOVA) further shed light on the critical roles of internet self-efficacy and access to devices in determining the level of acceptance of instructional videos in physical geography education. The p-values of 0.000 indicated that there were significant effects of internet self-efficacy and access to mobile/digital devices on the level of acceptance of instructional videos. The results, therefore, underscore the critical impact of internet self-efficacy and access to devices on the extent to which students accept the use of instructional videos in physical geography classrooms.

### Key words:

### 1. Introduction

Geography education has rapidly evolved over the years, equipping citizens with knowledge and competencies to interact positively and productively with the environment. As Obama, (2012) succinctly puts it, Geography is primarily about understanding the complexities of our world, appreciating the cultural diversities across continents, and in the end, it's about using all that knowledge to help bridge divides and

bring people together to develop the environment. The above assertion by the former American president shows that the study of geography is strategic to the developmental strides of people all around the world. Gersmehl (2014) affirms that geographical knowledge will assist people in dealing with an increasingly interconnected and often highly competitive world. At the senior secondary school level in Nigeria, the Geography syllabus consists of Regional Geography, Map Reading, Elements of Physical Geography, and Economic and Human Geography. Physical geography is central to the study of all other aspects of geography and this requires adequate knowledge of landforms within the earth's crust and other physical phenomena on the surface of the Earth.

However, despite these benefits of geography, its study, enrollment, and performance of students in different components of the subject have been on a decline in Nigeria. Overall, this has resulted in a populace with low geographical awareness of local and foreign people and landscapes. Scholars have expressed concerns over the poor level of achievement in critical components of Geography, especially Practical and Physical Geography with students finding it difficult to connect classroom instruction with landforms within their environment (Falode, Usman, Ilobeneke, Mohammed, Godwin, & Jimoh, 2016; Bello, 2021).

Students' poor achievement in physical geography has been corroborated by the Chief Examiners' Report (2021). The report indicates that "prominent among pupils weaknesses is their inability to describe and explain different landforms that can easily be found within their environment". Although the questions were relatively simple, candidates' answers to most of the questions were rather scanty, and it was clear that the students were not well grounded on the subject matter". The report concludes that "it seems there is lack of adequate learning resources like suitable textbooks in physical geography and map reading and other multimedia resources in the school. It was, therefore, recommended that teachers should ensure the use of relevant learning resources to improve the teaching and learning of physical and practical geography in the school. This brings to the fore, a need to integrate geography curriculum with learning technologies and digital tools to demystify the teaching and learning of physical geography and other components of the subject (Karma, Dorji, & Durga, 2023).

At different levels of education, stakeholders are increasingly advocating for the need to leverage the capabilities of digital tools and platforms for instructional content development and delivery. A cursory look at the emerging trends in educational technologies shows that technological resources, tools, and platforms are rapidly pervading the learning space, with a view to engaging Z-Generation learners, who live in a media-saturated environment. Some of these emerging technologies include virtual reality, gamification, game-based learning, online learning, and instructional videos (Ntibi, & Ibok, 2020).

At the heart of all technology-enabled teaching strategies is the instructional video that could support visual and auditory learners in classroom activities. In training and education circles, instructional videos have continued to play critical roles in content development and delivery. Notably, the challenges associated with the use of traditional mode of teaching physical geography education can be seamlessly surmounted by leveraging the capabilities of instructional videos to make learning realistic and connected to real-life situations. As Clark & Mayer (2016) posit, video instruction has the capacity to provide a complete audio and visual record of an event. Instructional video encourages student creativity while providing a distinctive context to the understanding and learning experience within and outside the classroom environment. The use of videos as learning resources in the classroom has witnessed a significant increase in acceptance across disciplines over the years (Abul, 2017).

The introduction of various forms of instructional videos into practical geography represents a pedagogical shift in geography education at all levels. As articulated by Kay, (2012), a combination of multimedia elements like pictures, text, and sound are powerful tools to get attention, simplify concepts, sustain interest, and make abstract concepts more realistic and engaging within the learning space. These videos, ranging from virtual field trips to hands-on practical, provide visual representation to explore landforms and physical characteristics of the earth's surface. This makes instructional videos quite appropriate to solve challenges related to geographical education, especially physical geography (Clark & Mayer, 2016).

In the world of physical geography, instructional video is increasingly emerging as a veritable visual tool to simplify complexities in the teaching of geographical concepts, simulate field experiences, and engage learners in ways that seemed difficult with the talk-and-chalk method. Apparently, the immersive features of instructional videos offer unique possibilities for students to explore physical landforms, landscapes, and other geographical phenomena with the community. In the context of Nigeria with diverse geographical landforms, integrating instructional videos into the geography curriculum holds great potential, with a view to demystifying the teaching and learning of physical geography and other aspects of geography (Oduwale, 2019).

It has been established in the literature that several factors could hinder the level of acceptance of the use of technology for the instructional process. Variables like attitude, motivation, internet self-efficacy, mobile phone self-efficacy, and access to devices have been identified as critical factors in technology use. In the context of this study, internet self-efficacy and access to mobile/digital devices have been identified as variables that could influence students' acceptance of the use of instructional videos for physical geography education.

Internet self-efficacy has to do with the belief in one's ability to effectively use the Internet to execute tasks. It remains a significant factor to consider when individuals are faced with the task of using technological platforms and resources to execute tasks (Shipman, Bannon, & Nunes-Bufford, 2015; Bello, 2021). Also, access to mobile/digital devices is a strategic factor that could influence the acceptance of instructional videos in geography classrooms. Mobile devices could afford students the opportunity to access instructional content within and outside the school environment. This is evident in the works of Masiu & Chukwuere (2018) who reported that the smartphone makes learning and research easier for students, as they can access their school information on the gadget through electronic learning (e-learning), and mobile learning (m-learning).

Previous studies (Falode, et al 2016; Nwokoye, Umeh, & Mbeledogu, 2019) have examined the effectiveness of video on students' learning outcomes in geography at different levels of education. However, what remains unclear is the students' level of acceptance of instructional videos as tools to enrich physical geography education. This study, therefore, investigated the level of acceptance of instructional videos among senior secondary students in Oyo State, Nigeria. By spotlighting the impact of internet self-efficacy and access to mobile/digital devices on students' acceptance, this study aimed to engender a multimedia-enhanced learning environment, where students can take advantage of the new possibilities offered by instructional videos within a physical geography classroom.

### 1.1 Research Questions

Based on the problems stated above, the following research questions were raised:

- i. What is the level of student acceptance of instructional videos among senior secondary school geography students in Oyo State?
- ii. What is the level of students' internet self-efficacy to use instructional videos for physical geography instructions?
- iii. What is the level of students' access to mobile devices to use instructional videos for physical geography instructions?

### 1.2 Hypotheses

- i. There is no significant impact of internet self-efficacy on the acceptance of instructional videos among Geography students in Oyo State
- ii. There is no significant impact of access to mobile devices on the acceptance of instructional videos among Geography students in Oyo State.

## 2. Literature Review

### Teaching and Learning of Physical Geography in Schools

The geography curriculum comprises various components including economic, regional, human, practical, and physical geography. All these components are interrelated and physical geography is central to the understanding of other areas of geography. The teaching and learning of this strategic component of geography have been faced with huge challenges including poor students' attitudes, inadequate facilities, disconnection between classroom instruction and learners' environment, and inappropriate teaching methods among other factors (Nworgu, 2017; Bello & Salawu, 2020). In most cases, geography teachers resort to verbal descriptions of physical phenomena on the earth's surface and this widens the disconnection between what students learn in the classroom and physical landforms in their environment. Physical geography deals with the formation of landforms and structures on the Earth. The main objective of physical geography is for students to be able to identify and relate with these geographical phenomena within their environment. However, teaching physical geography with a traditional approach defeats this purpose. There is, therefore, a need for a paradigm shift in the approach to the teaching and learning of geography, especially the physical aspect of geography. This has been well-advocated by scholars around the world (Wang, Liu, Li, & Zhang, 2019; Siti, Alias, & Jamaludin, 2019; Karma, Dorji, & Durga, 2023) that teachers need to integrate appropriate technological tools and platforms in the teaching and learning of different components of geography across levels of education. It is therefore imperative for geography teachers to recalibrate the instructional process and integrate appropriate technologies to make learning realistic and connected to real-life situations.

### Introducing Instructional Videos to enrich Geography Education

In the context of geography education, evidence abounds in the literature that students are demotivated when it comes to learning geographical concepts using the traditional/talk-and-chalk method of teaching. However, the introduction of technological tools and platforms enhances students' learning experience,

specifically when instructional videos are integrated into the learning process (Karma, Dorji, & Durga, 2023). This is articulated in the report of Siti, Alias, & Jamaludin, (2019) that students found instructional videos on YouTube to be engaging and motivating in learning different components of geography. This resulted in the improved learning outcomes and learning experiences of the students. Geography teachers can leverage the capabilities of instructional videos to introduce new concepts, reinforce learning, provide additional explanations, and improve students' learning outcomes in specific areas like practical and physical geography. As Wang, Liu, Li, & Zhang (2019) affirm, introducing YouTube videos in classroom instruction improves students' learning outcomes in different areas of geography. Apparently, instructional video has come as a positive response to bridge the gap between classroom instruction and physical landforms in learners' environments.

### **Acceptance of Instructional Videos in Teaching and Learning**

The effective use of technologies to enhance the instructional process can be largely influenced by the level of acceptance by the stakeholders within the education system. This has to do with the level of commitment to ensure the effective use of instructional video to enhance classroom instruction. Notably, the introduction of technology into the learning space requires a paradigm shift in the roles of critical stakeholders in the education system. This is well-encapsulated in the Technology Acceptance Model by Davis (1989), which is the most widely used model to explain students' acceptance of information systems. This model explains the causal relationship among critical variables like the users' beliefs, attitudes, intentions, and computer usage behaviour. Al-Harbi, (2011) posits that the actual use of technologies for instructional activities could be influenced by users' level of acceptance of such digital devices and tools. By implication, teachers' use of instructional videos for geography education could largely be a function of the level of acceptance to use these learning resources to facilitate the teaching-learning process. This makes the level of acceptance a critical factor to consider in the planning and implementation of technology use at different levels of education.

### **Internet Self-Efficacy and the Acceptance of Instructional Videos**

In recent times, the widespread use of instructional videos to facilitate learning has been made possible by the ready-to-use cameras available on mobile devices, free streaming media hosting and sharing platforms, and training of staff to acquire competencies in video recording and editing (Seaman, Allen, & Seaman, 2018; Ou, Joyner, & Goel, 2019). Scholars have affirmed that several factors, including attitudes, access, computer self-efficacy, and internet self-efficacy could affect the use of technologies in the instructional process. An important factor that could influence the acceptance of the use of instructional videos in the teaching-learning process is internet self-efficacy. Internet self-efficacy indicates learners' confidence in the use of devices and platforms like computers, LMS, and the Internet to seek information and execute Internet-related tasks. Evidence abounds in the literature that Internet self-efficacy is positively related to student's readiness and acceptance of the use of technological platforms and devices within the learning space. Adnan & Anwar, (2020) indicated that higher Internet self-efficacy resulted in better perceptions and academic performance in web-based learning tasks. Yilmaz, (2017) revealed that self-efficacy in basic ICT skills was positively related to literacy achievement and readiness to use technology. As affirmed by Pham, Lai, & Nguyen, (2021), Internet self-efficacy was a significant predictor of learner autonomy to access information on their devices within the instructional settings. Accessing instructional videos for teaching and learning is an internet-related activity and therefore requires students to be competent in the

navigation of internet-related platforms. This implies that internet self-efficacy could influence the manner in which students accept the use of videos for instructional purposes.

### **Access to Devices and Acceptance of Instructional Videos**

The use of instructional videos in the teaching-learning process is rapidly increasing particularly with the advancement in technologies and innovations across the globe. The increasing awareness of the capabilities of multimedia resources, particularly videos, can be explained in parts, by the reliance of humans on images as channels to enhance critical thinking and reflection. The fact that students possess diverse learning styles necessitates the need to leverage the capabilities of videos to make learning realistic and engaging (Ou, Joyner, & Goel, 2019). Notably, the way students accept these learning resources has continued to be the focus of research among scholars in different disciplines. Pardamean, & Susanto, (2016) assert that users' level of acceptance varies across different categories of people and could be due to their beliefs, perceptions, attitudes, and access to resources. Access to mobile/ digital devices within and outside the school environment could significantly influence the extent of acceptance of instructional videos to facilitate teaching and learning at various levels of education. As encapsulated in the findings of Arthur-Nyarko, & Kariuki, (2019), students with a higher level of access to mobile or digital devices responded positively to eLearning delivery in the Open and Distance Learning (ODL) system of education. The implication is that students require access to devices that could help them seamlessly interact with learning resources within and outside the school environments. Ostensibly, students' access to mobile/digital devices at home and school could largely impact the level of acceptance of instructional video as a learning resource in physical geography classrooms.

### **3. Materials and Methods**

The study adopted a descriptive survey research design to examine the acceptance of instructional videos to learn physical geography among senior secondary school students in Oyo State.

#### **3.1 Population and Sample**

The population of the study comprised all the Senior Secondary School II (SSS 2) students offering geography in public senior secondary schools across the three (3) senatorial districts of Oyo state. The districts are Oyo North, Oyo South, and Oyo Central. A simple random sampling technique was used to select three hundred and two (302) geography students across six (6) secondary schools in the 3 senatorial districts of Oyo State. This implies that 2 senior secondary schools were selected from each senatorial district.

#### **3.2 Instrument for Data Collection**

The study used a questionnaire to elicit responses from the respondents. It is divided into four Sections. Section A provides the demographic information of the respondents, Section B examines the Acceptance Level of Instructional Videos with 12 items, Section C measures the level of internet self-efficacy to use instructional videos which comprises 10 items, and lastly, Section D examines the level of access to mobile devices with 10 items.

### 3.3 Reliability of the Instrument

In order to ensure that the items in the instruments are consistently reliable, the questionnaire was administered to twenty (20) Senior Secondary School II Students who were not part of the main study. The data was analyzed using Cronbach Alpha and a reliability Coefficient of 0.81 was obtained to show that the instrument is reliable.

### 3.4 Procedure for Data Collection

The questionnaires were administered among the selected students across the 3 senatorial districts in the state. Permission was sought from the Principal of each school and it was granted. Three Hundred and thirty-two (332) questionnaires were distributed to the Geography students in the schools. At the end of the administration, three Hundred (302) questionnaires were returned which formed the sample used for the study.

### 3.5 Method of Data Analysis

The research questions were answered using descriptive statistical tools including the mean, standard deviation, and frequency distribution. The differences within the means were analyzed using analysis of variance (ANOVA) to determine the influence of independent variables (internet self-efficacy and access to mobile devices) on the dependent variable (acceptance to use instructional videos).

## 4. Results

**Research Question 1:** What is the level of students' acceptance of instructional videos among senior secondary school geography students in Oyo State?

**Table 1: Level of students' acceptance of instructional videos**

S/N	Items	SA	A	D	SD	MEAN
1	I would like instructional videos to be an integral part of the teaching-learning process.	57.7	32.0	5.7	4.7	3.3
2	I would prefer the use of instructional videos in physical geography classroom activities.	31.3	51.3	8.2	9.1	3.1
3	I can look for resources to participate in geography classroom activities when instructional video is used.	27.2	34.5	22.3	16.0	2.7
4	I am not ready to participate in the use of instructional videos for teaching and learning physical geography.	36.3	41.4	15.3	7.0	3.1
5	Students would not be motivated to be part of geography classroom activities without the use of appropriate instructional videos.	23.0	35.3	27.7	14.0	2.7
6	I am not ready to participate in the use of instructional videos for learning at all.	24.3	20.3	31.7	23.7	2.9
7	I can only use instructional videos to learn physical geography if I am forced to do so.	23.3	23.0	21.0	32.7	2.8
8	My Geography teacher should use instructional videos in the teaching of all topics in geography.	37.2	43.5	13.0	6.3	3.1
9	I am interested in using instructional videos to learn about different landforms in my environment.	22.3	58.7	11.5	7.5	3.0
10	I would prefer that instructional videos be used in all my subjects.	30.7	30.0	27.3	12.0	2.8
11	Students should be encouraged to learn physical geography by watching instructional videos.	33.0	49.5	10.5	6.9	3.2
12	I prefer any teaching method that involves the use of instructional videos.	38.0	36.9	15.4	9.6	3.0

The Weighted Mean Average is 3.0

Table 1 reveals the level of acceptance of instructional videos among senior secondary school students in Oyo state, Nigeria. With a weighted mean average of 3.0, the result indicates that the extent of students' acceptance of instructional videos for physical geography classroom activities is high. For example, 89.7% of the respondents were of the opinion that instructional videos should be made an integral part of the teaching-learning process. About 82.6% affirmed that they would prefer the use of instructional videos in physical geography classroom activities, while 61.7% indicated their readiness to look for resources to participate in geography classroom activities when instructional videos are used. Apparently, senior secondary school students who participated in the study showed a high level of acceptance of instructional videos in geography classrooms, especially for teaching and learning physical geography.

**Research Question 2:** What is the level of students' internet self-efficacy to use instructional videos for physical geography instructions?

**Table 2: Level of Internet self-efficacy to use of instructional videos**

S/N	Items	SA	A	D	SD	MEAN
1	I am confident in my ability to search for information on the Internet.	34.7	40.3	17.0	8.0	3.1
2	I can easily browse the Internet and search for relevant materials for learning purposes.	48.7	30.0	11.0	10.2	3.0
3	I believe in my ability to use the Internet for communication and for sharing information.	29.0	36.0	26.7	8.3	2.9
4	I can search the Internet for instructional videos on different topics.	29.7	31.0	27.1	12.2	2.8
5	I can easily identify different icons on the Internet while searching for instructional videos	23.3	23.0	20.0	33.7	2.9
6	I can easily identify appropriate instructional videos on YouTube	38.6	30.7	22.0	8.7	2.9
7	I find it difficult to navigate online platforms for teaching and learning activities.	31.0	36.3	26.7	6.0	2.9
8	I am confident in my ability to connect to the online learning platform.	25.3	33.7	17.3	23.7	2.5
9	I can easily interact with classmates of mine on the internet/group WhatsApp page.	32.3	37.0	21.0	9.7	2.9
10	I am confident of my ability to download learning resources on the internet.	24.3	33.7	18.3	23.6	2.5

The Weighted Mean Average is 2.8

The results in Table 2 show the students' level of internet self-efficacy to use instructional videos to learn physical geography. A weighted mean average of 2.8 implies the extent of internet self-efficacy among senior secondary school students is above average. This is reflected in the responses of 75% of the participants who indicated a high level of confidence in their abilities to search for information on the Internet. Also, 60.7% affirmed they can search the Internet for instructional videos on different topics. This means that the students showed a high level of internet self-efficacy to utilise instructional videos for classroom activities in physical geography.

**Research Question 3:** What is the level of students' access to mobile devices to use instructional videos for physical geography instructions?

**Table 4.3:** Level of students' access to mobile/digital devices to use instructional videos for physical geography instructions

Not Accessible (NA), Slightly Accessible (SA), Accessible (A) Very Accessible (VA)

S/N	Items	NA	SA	A	VA	MEAN
1	I have access to mobile devices at home.	19.2	25.7	44.2	10.9	2.3
2	I have access to my parents'/relatives' mobile phones to watch instructional videos at home.	20.7	24.3	31.0	24.0	2.6
3	I have a personal mobile phone/laptop that I can use at home to watch instructional videos	44.2	15.7	29.2	10.9	1.9
4	I believe some students do not have access to mobile phones/computers at home.	12.7	42.3	18.5	26.4	2.5
5	I can watch instructional videos using the computers in the computer laboratory at my school.	14.2	53.9	21.9	10.0	2.2
6	All students are allowed to use computers in the computer laboratory for instructional purposes.	14.7	31.1	31.7	22.5	2.6
7	My school allows the use of mobile/digital devices during school hours.	42.2	17.7	29.1	10.8	1.9
8	My school provides access to mobile/digital devices for instructional purposes.	19.4	36.9	32.5	11.1	2.3
9	I have access to the Internet connection to use mobile phones at home for instructional purposes.	13.7	31.1	32.7	22.5	2.6
10	I find it difficult to convince my parents to use their mobile phones for instructional purposes.	32.4	16.9	32.5	18.1	2.3

The Weighted Mean Average is 2.3

The result from Table 3 reveals the students' level of access to mobile/digital devices to watch instructional videos on physical geography. It could be observed that the weighted mean average of 2.3 is slightly above the average. This reveals that the level of access to mobile/digital devices among the students is just above average leaving room for a significant improvement. For instance, 55% of the respondents indicated access to their parents'/relatives' mobile phones to watch instructional videos at home. Specifically, 31.9% affirmed access to computers in the computer laboratories at their schools to watch instructional videos. The implication is that a good number of senior secondary school students do not have access to mobile/digital devices at their schools to watch instructional videos.

**Hypothesis 1:** There is no significant impact of internet self-efficacy on the acceptance of instructional videos among Geography students in Oyo State.

**Table 4: Impact of internet self-efficacy on students' acceptance of instructional videos**

ANOVA					
Acceptance					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	3694.327	25	148.289	6.170	.000
Within Groups	6566.343	276	24.028		
Total	10262.570	301			

Table 4 shows the impact of internet self-efficacy on students' acceptance of instructional videos for physical geography classroom activities. The significance level of 0.000 implies that the impact of internet self-efficacy on the acceptance of instructional videos was significant. In other words, students' level of internet self-efficacy had a significant impact on their level of acceptance of instructional videos in physical geography classrooms.

**Hypothesis 2:** There is no significant impact of access to mobile devices on the acceptance of instructional videos among Geography students in Oyo State.

**Table 5: Impact of access to mobile/digital devices on the acceptance of instructional videos**

ANOVA					
Acceptance					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	3612.075	28	125.155	5.051	.000
Within Groups	6652.495	273	24.839		
Total	10254.570	301			

Table 5 shows the effect of access to mobile/digital devices on students' acceptance of instructional videos for physical geography classroom activities. The significance level of 0.000 indicates that the impact of access to devices on the acceptance of instructional videos was significant. In other words, students' access to mobile/digital devices had a significant impact on their level of acceptance of instructional videos in physical geography classrooms.

## 5. Discussion of the Findings

Findings from research question one revealed that senior secondary school students showed a high level of acceptance of instructional videos for geography education, especially in physical geography classroom activities. The implication is that geography students recognised the capabilities of instructional videos in the teaching and learning of physical geography and therefore showed a high level of acceptance of the use of these learning resources for classroom activities. This might not be unconnected with the visual and engaging powers of instructional videos in making learning realistic and connected to real-life situations. It would be noted that one of the problems with the teaching and learning of physical geography is the inability of students to relate classroom instruction with landforms within their environment. The capabilities of instructional video could bridge this disconnection and make geography quite interesting to students. This finding is in line with Thorpe (2006) who affirmed that videos are widely used in teaching-learning practices to develop new learning methods such as online and distance learning, which has generated a high level of acceptance from students at different levels due to their capabilities to make learning realistic and interesting at all time.

The findings from research question 2 indicated that senior secondary school students showed a relatively high level of internet self-efficacy to utilise instructional videos in the classroom. An instructional video has the power to make learning connected to real-life situations and therefore stimulates learners to learn the content. Success can be achieved in any video integration effort when learners possess the required competencies to navigate the Internet to access these learning resources for instructional activities. This is a digital age and the main language many students understand is technology. Technology has pervaded every aspect of our national lives as individuals interact through the internet for social, economic, political, and educational engagements. The continuous interaction on the internet could have triggered this high level of internet self-efficacy among the respondents.

In addition, findings from research Question 3 indicated that the level of access to devices among senior secondary school students was a little above average. Apparently, a good number of students still face hindrances in accessing devices to use instructional videos for the teaching-learning process. This finding is in line with what Adepetun, (2017) reported in Adedeji, Godwin-Ewu, Irinoye, & Ewuthere, (2021) who found out that “although there are more than 90 million Internet users in Nigeria, which ranked the country as first in the continent of Africa, more than half (53%) of the population still lack access to the Internet and mobile devices”.

Findings from hypothesis 1 showed that students' internet self-efficacy had a significant impact on the level of acceptance of instructional videos for physical geography. This might be due to the fact that students at all levels of education are rapidly taking advantage of Internet connections for social and educational engagements. Furthermore, access and use of instructional videos within the learning space are largely internet-related activities. It can, therefore, be concluded that students with higher levels of internet self-efficacy would likely accept the use of instructional videos for instructional activities. This is corroborated by the findings of Pham, Lai, & Nguyen, (2021), who found that internet self-efficacy was a significant predictor of learner autonomy to access information on their devices within the instructional settings.

Lastly, findings from hypothesis 2 confirmed that access to mobile/digital devices had a significant effect on senior secondary school students' level of acceptance of instructional videos in physical geography classrooms. Invariably, students can only utilise learning resources if they have access to those resources through the required devices or platforms. The main takeaway from this finding is that access to required devices can largely promote acceptance of instructional videos within the learning space. Arthur-Nyarko, & Kariuki, (2019), reported that access to devices and electricity had a significant influence on learners' eLearning delivery mode preferences.

## 6. Conclusion

The need for geography classrooms to be integrated with new teaching approaches beyond the traditional mode has been widely acknowledged among scholars across the globe. Physical geography is a component of geography that deals with physical landforms on the earth's surface. Therefore, the use of multimedia resources like instructional videos remains indispensable to make learning connected to learners' environments. This study has been able to establish the need to assess the level of acceptance of these learning resources among students at the secondary school level. The findings underscore the critical impact of internet self-efficacy and access to devices on the extent to which students accept the use of instructional videos in physical geography classrooms. So, the integration of instructional videos into geography classrooms should consider students' internet self-efficacy and access to mobile/digital devices to ensure the full realisation of the objectives of teaching physical geography at the senior secondary school level of education.

## 7. Recommendations

The following recommendations are made, based on the findings from this study:

- i. When stakeholders want to integrate instructional videos into geography classrooms, critical factors like internet self-efficacy and access to mobile/digital devices among students should be taken into consideration to ensure seamless implementation.
- ii. There is a need to improve access to mobile/digital devices within and outside the school environments, such that students can easily watch instructional videos on different topics in physical geography.
- iii. Considering the high level of acceptance among the students, adequate capacity training on video production should be organised for teachers, especially at the secondary school level of education.

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