



USING THE UNIFIED THEORY OF ACCEPTANCE AND USE OF TECHNOLOGY TO ASCERTAIN LOW PATRONAGE OF VIRTUAL TEACHING AMONG SECONDARY SCHOOL TEACHERS OF ENGLISH IN SULEJA LGA OF NIGER STATE

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Abstract.

It has been reported that teachers in secondary schools are skeptical concerning virtual teaching even in this era of Covid19 pandemic that has totally kept students out of school. This study was carried out to investigate reasons responsible for this pessimistic attitude of English teachers in embracing Virtual teaching in Suleja LGA of Niger State. The study adopted a survey research design and made use of 21-item structured questionnaire validated by two specialists, in computer and English which yielded reliability co-efficient of 0.87. It was administered to ninety English teachers in twenty secondary schools. The 21 items were based on the Unified Theory of Acceptance and Use of Technology (UTAUT) model. Data collected were analyzed using percentages. The study revealed among others, that virtual teaching according to teachers' perception is ineffective, teachers lack prerequisite ICT knowledge to sufficiently embrace virtual teaching; schools, teachers, and students do not have sufficient ICT facilities that can support the system. The study therefore recommends that English language teachers should be given specific ICT training and deliberate policies that would make virtual teaching compulsory in secondary schools enacted.

Keywords: *Virtual teaching, performance expectation, effort expectancy, social influence, facilitating conditions.*

Introduction

Virtual teaching also known as online teaching is a curriculum delivery system whereby teaching does not take place in normal classroom. Farrel (2000) while tracing the emergence of virtual teaching stated that the forces of globalization,

population growth, availability of sophisticated communication systems and greater demands for education have made new means of reaching learners other than the conventional classrooms imperative. And today, the global ‘lockdown’ caused by devastating impact of covid19 pandemic, has immensely necessitated the need to diversify our educational delivery system. With the closure of schools and other quasi-educational institutions, Aiyedun (2020), Bao (2020) and Haussain (2020) reiterated that all countries across the world are making frantic efforts of how to ‘keep the doors of learning open’. For instance, in Nigeria, Slum2School Africa, a voluntary –driven development organization launched virtual learning classroom to enable children in rural (remote) communities to access education (Adebusoye, 2020). CANVASLMS, an online system of Edo State University in Iyamho, has according to the vice chancellor made it possible to complete all second semester courses despite the closure of the university (Aluyor, 2020). Other individuals and few schools have also started to employ this curriculum delivery system to reach out to their students.

This new trend of teaching differs from the traditional class-room based delivery model. It is often interchangeably referred to as “online learning,” “e-learning”, “e-education”, web-based learning”, or “virtual teaching” (Farrell, 2000). Typically, the use of digital networks is central to the entire practice; it involves the application of ICT and takes place in an online environment whereby the teacher and learners are physically separated in terms of place and times, or both.

This mode of teaching has been widely criticized in Nigeria as being ineffective and inadequate by various stakeholders; including the general public, parents, teachers and even sometimes by students who are direct ‘consumers of the product’. It is on this premise that this research work sought to find out (using the Unified theory of acceptance and use of technology model) why this important trend of teaching and learning continues to receive little or no substantial attention and practice in Nigeria.

Conceptual clarifications

1. Theory

A theory is an assumption that is based on a hypothesis. The hypotheses are usually tested through the collection of some data which are analysed

to ensure that the claims of the theory can be tested, verified and replicated (Aliyu, 2015). Thus, theory as a supposition has provided overwhelming evidence of success across various aspects of teaching and learning. Educational theories provide set of principles, reasons and techniques that explain how best a learner can acquire, retain and recall new information. Specifically, theories of language teaching and language research have far-reaching implications for accomplishing unprecedented rates of progress particularly in second language (L2). Hence, Freeman and Long (1991), Venkatesh and Davis (2000), Venkatesh and Bala (2008) opine that over the years, theories on language acquisition and learning by prominent scholars and linguists like those of Chomsky in 1950s; Krashen, 1970s, Givon, 1970s-1980s have consistently come up with variety of responses to questions regarding language teaching and learning, leading to development and establishment of paraphernalia of new strategies, pedagogies, methodologies to be used in improving and modernizing the processes.

2. The Unified theory of acceptance and use of technology (UTAUT)

The theory (UTAUT), is ‘a technology acceptance model formulated by Venkatesh and others at the beginning of 21st century as a reaction to Davis, Bagozzi and Warshaw’s theory known as “user acceptance of information technology: Toward a unified view” earlier developed in 1989 (Venkatesh and Davis 2000).

UTAUT, as a theory was developed to have practical applications in teaching and learning using ‘acceptance’ as its basic element. The word ‘acceptance’ in this context or circumstances assumes a two-way dimension: the teacher has to accept and use the technology while the learner equally has to accept it as a tool for learning (Chao, 2019). Accordingly, UTAUT is built on four key constructs (Willians, Rana and Yogesh 2015) that directly influence acceptance. These constructs are performance expectancy, effort expectancy, social influence and facilitating conditions

The Four Constructs of UTAUT

Performance Expectancy

Chao (2019) refers to performance expectancy as the “degree to which the user expects that using the system will help him or her to attain gains in job performance”. On that note, Sarfaraz (2017) reaffirms that with the advancement of information and communication technology, understanding individuals’ use of technology has become a major issue for consideration. The

individual is the most important predictor of the usage because the expected result usually influences the user greatly.

Effort Expectancy

Effort expectancy is the 'level of easiness related with using (Venkatesh 2003). Sarfaraz (2017) explains effort expectancy as 'users' perception of ease of use' determines the use of the technology. Invariably, the less effort users put in to use technological devices, the more such devices become acceptable and popular. If the technology is simple to use, it attracts more users; for instance, the mobile telephone received boost shortly after its introduction into Nigerian market because of its easy way of usage. National Communication Commission (NCC, the regulatory body saddled with the responsibility of regulating telecommunication matters in Nigeria) in its news bulletin, 2016, 2018, 2019 claims that 'millions of Nigerians subscribe for mobile telephones lines annually'.

Social Influence

Social influence plays great impact on acceptance and use of an emerging technology. According to Pederson and Ling (2002), acceptance of all innovations, are tied to social influence; the desire to blend in or connect encourages people to adopt an innovation. And that an organism acceptance depends on the relevant information available within the social context in which the organism operates. This implies that the people we interact with generally influence our level of acceptance of new innovations including ideology, scientific thoughts, technology and other aspects of human endeavour.

Facilitating conditions

In the context of technology utilization, Laforet (2005); Penarroja (2019) delineate facilitating condition as 'organizational support for users of technology that can influence system use'. The extent which an individual believes that organizational and technical infrastructures exist to sustain the use of a system influence users positively. Provision of enabling institutional environment such as availability and reliability of facilities, access to facilities and effective management are key, the system should be 'up' and 'active' whenever the user needs to put them into use.

Statement of the problem

Despite the success stories of virtual teaching worldwide, it continues to receive criticism and condemnation in Nigeria. Some of the critics see or label it as ‘an unnecessary venture’ ‘ineffective’, ‘waste of resources’ ‘inaccessible to learners’ and ‘practically not being possible’. This negative view continues even in this period of Covid19 pandemic, a period that has forced students to stay out of school. Hence, this study aimed at investigating reasons for the presumed low level of virtual teaching by secondary school English teachers in Suleja Local Government Area of Niger State. The investigation was anchored on four constructs of the Unified Theory of Acceptance and Use of Technology (UTAUT), namely, performance expectation, effort expectancy, social influence and facilitating conditions.

Purpose of the Study

The specific purposes of the study include:

- i.** To investigate the general attitude of secondary school English teachers in Suleja LGA towards virtual teaching.
- ii.** To investigate the perception of secondary school English teachers in Suleja LGA regarding virtual teaching.
- iii.** To establish reasons responsible for low patronage of virtual teaching by secondary school English teachers in Suleja LGA.
- iv.** To evaluate skills for virtual teaching among secondary school English teachers in Suleja LGA.

Research Questions

The following questions were raised to guide the conduct of the study:

- i.** How does ‘performance expectation’ affect secondary school English teachers’ perception of virtual teaching?
- ii.** To what extent does ‘effort expectancy’ account for secondary school English teachers’ performance in virtual teaching?
- iii.** To what degree does ‘social influence’ affect secondary school English teachers’ attitude towards virtual teaching?
- iv.** To what extent does ‘facilitating conditions’ hinder secondary school English teachers to effectively embrace virtual teaching?

Methodology

Scope, Design and population of the study:

The design of the study was purely survey, giving rise to descriptive data. This method was adopted because it enabled the researcher to obtain relevant data across section of the population for easy description and interpretation. The population of study was made up of secondary school English teachers in Suleja Local Government Area of Niger State. Fifteen secondary schools (made up of public and private) were selected using the stratified random sampling method. And six teachers in each of the school were purposely chosen, and that gave a total sample size of 90. Purposely selection method was used in this study because the data was collected only from teachers who teach English language.

Instrumentation

Data was collected through the use of structured questionnaire, which contained items structured on four- point Liker rating of strongly agree (SA, 4points), agree (A, 3points), disagree (DA, 2points) and strongly disagree (SD, 1point). The instruction requires respondents to tick appropriately; it also contained a section that requires respondents to freely express their views. Each item was rooted in the four constructs of the Unified Theory of Acceptance and Use of Technology (UTAUT), namely; expectation, effort expectancy, social influence and facilitating conditions. The questionnaire contains items that seek information based on the research questions.

Validation

The content validation of the instrument was done by two specialists; curriculum delivery and computer application experts respectively. These experts did both the face and content reliability of the instrument.

Reliability

Preliminary trials of the items were administered to 15 secondary school English teachers (from schools that were not part of the sample but within the Local Government Area) and a reliability coefficient of internal consistency of 0.87 was obtained.

Data Analysis

Collected data were analyzed using simple percentage.

Results

Results of data analysis on the research questions are presented in tables 1-4 below.

Table 1: Percentage scores of performance expectation of secondary school English teachers' perception of virtual teaching

Number of respondents	Items	Strongly Agree	Agree	Disagree	Strongly Disagree	Total
90	1. Virtual teaching enhances students' communicative competency	4	9	20	76	109
	2. Virtual teaching is capable of improving students' listening skills.	4	12	24	73	113
	3. Virtual teaching is capable of improving students' reading skills.	0	0	32	74	106
	4. Virtual teaching is capable of improving students' reading skills.	4	15	18	75	112
	5. Virtual teaching is capable of improving students' writing skills.	0	6	28	74	108
Total		12	42	122	372	548
Percentage		2%	8%	22%	68%	100%

Table 1 above shows aggregate percentage scores of items 1, 2, 3, 4, and 5 as 2%, 8%, 22% and 68%. The scores generally indicate disagreement to items

view as potentials of virtual teaching. Only 2% of the respondents strongly agreed and 8% agree. Analysis of table 1 therefore confirms that ‘performance expectation’ plays significant role in determining secondary school English teachers’ disposition regarding efficacy of virtual teaching.

Table 2. Percentage scores of the effects of ‘effort expectancy’ on secondary school English teachers performance in virtual teaching.

Number of respondents	Items	Strongly Agree	Agree	Disagree	Strongly Disagree	Total
90	6. Virtual teaching is convenient for you and your students	8	15	38	67	113
	7. You have received formal training on virtual teaching	0	9	34	70	104
	8. You and your students are familiar with virtual classroom	0	0	42	69	111
	9. Your students perform better when lessons are delivered through virtual teaching.	4	6	22	76	108
Total		12	30	136	282	436
Percentage		2%	5%	29%	64%	100%

Table 2 above provides aggregate percentage score of items 6, 7, 8, and 9 as 2%, 5%, 29% and 64% .The scores generally indicate disagreement because only 2% of the respondents strongly agreed and 5% agree while 29% and 65% disagree and strongly disagreed respectively. Thus, analysis of table 2 confirms that ‘effort expectancy’ affects secondary school English teachers’ performance in virtual teaching.

Table 3. Percentage scores of effects of social influence on secondary school English teachers' attitude towards virtual teaching

Number of Items respondents.		Strongly Agreed	Agree	Disagree	Strongly Disagree	Total
90	10. Colleagues' negative views on virtual teaching discourage me.	69	24	15	16	124
	11. Your students are enthusiastic to learn via virtual delivery system	77	26	0	0	103
	12. Virtual teaching is accepted by other stakeholders (eg Parents) as an alternative to traditional classroom system.	4	6	40	67	117
	13. Your school authority has warmly embraced virtual teaching	4	9	32	74	119
Total		154	87	65	157	463
Percentage		33%	19%	14%	34%	100%

Table 3 shows aggregate percentage scores of items 10, 11, 12, and 13, as 33%, 19%, 14% and 34%. The percentage scores generally indicate a mixture of agreement and disagreements. However, the aggregate for agreement (33% and 19%) is 52% while that of disagreement is (14% and 34%) 48%. Analysis of table 3 confirms that social influence greatly affects secondary school English teachers' attitude towards virtual teaching in Suleja LGA.

Table 4. Percentage scores of effects of facilitating conditions on virtual teaching.

Number of respondents.	Items	Strongly Agree	Agree	Disagree	Strongly Disagree	Total
90	14. The cost of internet connectively is relatively low	16	15	24	69	124
	15. The Internet connection is stable for virtual teaching (good internet connection)	0	0	26	77	103
	16. There is constant electricity supply to power our devices for virtual teaching	0	0	38	71	109
	17. Our range of devices; desktop computer, laptop, tablet and smart phone are easily available for virtual teaching and learning for teachers and students	4	9	32	74	119
	18. Both hardware and software are adequate and functional	4	6	40	67	117
	19. You have a microphone to speak with your students	3	9	20	74	106
	20. You are not new to Classgap/ Wi-Fi connections	4	12	23	64	103

Total		31	51	203	482	767
Percentage		4%	7%	26%	63%	100%

Table 4 above shows aggregate percentage scores of items 16, 17, 18, 19, 20, and 21 as 4%, 7%, 26% and 63%. The percentage scores generally indicate disagreement because only 4% and 7% strongly agree and agreed respectively; while 26% disagreed and 63% strongly disagreed. Analysis of table 4 therefore confirms that facilitating conditions is capable of hindering teachers' performance in virtual teaching.

Discussion of Results

The main objective of this research work was to investigate reasons for the presumed low level of patronage of virtual teaching by secondary school English teachers in Suleja Local Government Area of Niger State.

The result of the analysis obtained from the data collected shows that virtual teaching in secondary schools particularly in English language learning is besieged with lots of problems. Teachers and parents, the two critical stakeholders have poor perception regarding efficacy of virtual teaching. A substantive percentage of them still doubt the effectiveness of virtual teaching, although, the students showed willingness and keenness. In a related research, Olowogboyega (2020) stated that most teachers are not 'thrilled about it' (virtual teaching). This phenomenon largely accounts for the low patronage of virtual teaching by this group of teachers as reiterated by Chao (2019) that effective usage of any information technology 'depends on user's acceptance'. The findings also revealed that teachers have not acquired sufficient basic skills for virtual teaching; almost all had not received any form of formal training. Only five percent of the respondents, (see table 1 above) in private schools agreed that they were familiar or conversant with nitty-gritty of virtual teaching. This result is in agreement with the findings of Sarfaraz (2017) who advocated that organizations need to improve ease use of technology for efficient performance and acceptance.

In addition, analysis of the results also reveals that basic facilities for virtual teaching and learning are grossly inadequate. Teachers and students lack essential and basic e-learning facilities such as functional computer, internet,

microphones and even power (electricity) supply. Adeyeye, Afolabi and Ayo (2014), Olowogboyega (2020) who identified lack of e-learning facilities, high cost of data and poor internet as impediments to successful virtual teaching in Nigeria unequivocally stated that ‘many students don’t have access to tablets, laptops or wifi’. Although, students may be willing, they are handicapped because facilities are usually not sufficiently available.

Conclusion

Based on the findings, the following conclusions were drawn:

- i. Secondary school English teachers and parents in Suleja Local Government Area of Niger were not enthusiastic about virtual teaching. They have negative perception and attitude regarding the effectiveness of this system of curriculum delivery.
- ii. Students were eager to learn via this method probably because they were already familiar with ICT devices; on daily basis, they read news, chat with friends, send messages and watch movies on the internet.
- iii. Schools, teachers and the students Lack the needed facilities for smooth virtual teaching and learning.
- iv. The teachers do not have the requisite knowledge of ICT and this was a major hindrance.
- v. In summary, this study has used the four constructs of Unified theory of acceptance and use of technology (UTAUT) model to ascertain the causes of low patronage of virtual teaching among secondary school English teachers in Suleja LGA.

Recommendations

Based on the findings, the following recommendations were made:

Teachers, parents and indeed the general public need to be adequately enlighten to embrace virtual teaching and learning considering its importance and necessity. This can be done by educational agencies like Educational Development and Research Council, National University Commission, National Commission for Colleges of Education and tertiary institutions.

There should be ‘tailored-made’ ICT trainings for secondary school teachers specifically for virtual teaching.

Basic ICT infrastructures should be put in place in schools while teachers and students -through their parents endeavor to have laptop or desktop computers, smart phones and necessary devices for virtual teaching and learning.

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