THE PERCEPTION, ATTITUDES AND READINESS TOWARDS ONLINE LEARNING AMONG COLLEGE OF EDUCATION PRE-SERVICE TEACHERS IN KATSINA STATE, NIGERIA

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Abstract
The emergence of digital technology innovations which give birth to online learning, virtual classes and interactive multimedia has foster students' independent learning. However, student perspective on these innovations is crucial to its implementation in the classroom. Therefore, this study examined the perception, attitude and readiness towards online learning among college of education pre-service teachers in Katsina State, Nigeria. The study adopted a descriptive cross-sectional survey design. The population for this study comprises 6,350 NCE pre-service teachers from all Colleges of Education in Katsina State. Using simple random sampling, 230 NCE I & II pre-service teachers were selected for the study. Three research questions guided the study. The research instrument for this study was a structured instrument on pre-service teachers' Perception, Attitude and Readiness towards Online Learning Questionnaire (PAROLQ). The reliability of the instrument was 0.72, 0.78, and 0.81 for perception, attitudes and readiness to online learning respectively. The data collected were analysed using Mean and Standard Deviation. The findings of the study showed that pre-service teachers have positive perception and attitudes towards online learning. The finding also shows that pre-service teachers are ready to implement online learning. It was recommended among others that pre-service teachers should be provided with a conducive environment for online learning.

Keywords: Attitudes, Online learning, Perception, Readiness, Pre-service teachers

Introduction
The nations of the world are exploring the opportunities provided by information, communication and technology through the use of innovative technological devices and platforms such as online learning, virtual classroom, mobile learning, and flipped classroom among others, in the training of their professionals. Siddiqui (2014) observed that emergent development in information and communication technologies (ICTs) is altering the way knowledge is acquired and delivered in an evolving and fast changing world. However, the old system of teacher training which is traditionally rigid and non-interactive no longer seems to meet the requirements of modern teaching instruction in the 21st century (Wong & Fong, 2014). It only allows the students to receive instruction from the teacher without building their engagement level with the subject matter. Learning is restricted to the classroom and characterised by memorisation, passive listening and theoretical rather than practical learning. Hence the search for an alternative instructional platform such as online learning that enhance students engagement.

Online learning is a modern way of teaching many facets of educational endeavours, including reading and writing skills of both native and non-native speakers of English. It is described by most scholars as access to learning experiences via the use of some technologies (Bataineh & Bani-Abdel, 2016). Online learning refers to instructional environments supported by the internet which comprises a wide variety of programmes that use the Internet within and beyond school walls to provide access to materials as well as facilitate interaction among teachers and students. It is also related to the more common concepts of online help, online documentation, and online services (Cavanaugh, 2017). The role of online learning in teaching and learning is enormous. This is because high quality educational materials from across the world are being made available for free to many thousands of users. In this regard, insight is needed into the processes of utilizing online learning to provide scaffolding and effective way of enhancing learning in collages.

Online learning is essentially the use of e-learning tools in a distance education mode using the Web as the sole medium for all student learning and contact (Linjawi & Alfada, 2018). Since many users today have access to direct Internet connections, e-learning is often identified with web-based learning (Hadad, 2013). Many writers refer to "online learning," and "web-based learning" interchangeably (Skeels & Grudin, 2016). Therefore online learning is the types of learning that takes place over the internet. Online learning is essentially the use of e-learning tools in a distance education mode using the Web as the sole medium for all student learning and contact.

The aim ofpre-service teacher education programme in Nigeria is producing teachers with high personal and professional discipline, with knowledge of appropriate pedagogical knowledge and skills to facilitate students' learning (FRN, 2012). The Minimum Standards further spell out these objectives to include:

i. professionally combinesconventional and ICT or other innovation instructional strategies in generating, and imparting knowledge, attitudes and skills at basic education level;

ii. develop, select and effectively use appropriate curriculum processes, teaching strategies, instructional materials and methods for maximum learner achievement (FRN, 2012).

To achieve this objective, the perception, attitude and readiness of pre-service teachers must be taken into consideration because positive or negative perception could influence the pre-service teachers' attitudes and readiness to engage in online learning.Skeels andGrudin, (2016) reported that positive attitudes of students' and behaviours regarding online learning are important and necessary towards the acceptance and adoption of online learning. Their computer experiences, which consists apparent self-use, gratification and effectiveness and application of online learning play a dominant role (Liu, 2011).

Perception is defined as an act of being aware of one's environment through physical sensation, which denotes an individual's ability to understand. However, many social psychologists have tended to develop the concept around one of itsmost essential characteristics that the world around us is not psychologically uniform toall individuals (Seels& Richey, 2017). For the present study perception means ability to perceive the usefulness of online education among others. The perception of the students is one of the key factors to this study, therefore, it is important to understand that the perception of students which can shape their actions towards the use of online learning platform.

This implies that having a positive perception about the utilization of online learning platform among tertiary institution students can add quality to their method of teaching. Consequently, their adoption, will also be of benefits to the students as well. An attitude is a favourable or unfavourable evaluation of something. Attitudes are generally positive or negative views of a person, place, thing, or event (Wong & Fong, 2014).

Readiness has been defined as the point at which a person is ready to learn and the time during which a person transitions from being a non-reader into a reader. Other terms for readiness include early literacy and emergent reading. Cagiltayet al. (2016) described readiness as the mental and physical preparedness of an individual for electronic teaching and learning. Ehlers (2011) stated that for a particular technology to be adopted in teaching and learning, stakeholders' readiness must be put in place (Tang & Lim, 2013).

Mustafa (2015) whoinvestigates students 'perceptions of the use of online learning among university students in Al Ain University of Science & Technology. The results showed that students perceive technologytoattracts attention and facilitates learning and is easyto use. Chaka &Govender (2017) reported that colleges of education students in Nigeria have positive perception and are ready to embrace mobile learning. On the contrary, Wong & Fong (2014) reported that students' perception towards traditional face to face learning was positive and higher than their perception towards online learning.

In his study on students' attitudes towards online learningWongand Fong (2014) investigated students' attitudes on blended and online learning environment, exploratory case study was adopted, and findings indicated that students have positive attitudes towards online learning. Similarly, Obaid (2017) conducted a research on students' attitude towards online learning at tertiary level. The study aimed at examining the attitudes of undergraduate students towards online learning. The study mainly focused on exploring the relationship between undergraduate students' attitudes towards Technology Acceptance Model, with a special reference to online learning. The result indicated that undergraduate students have positive attitudes towards online learning and there.

Readiness is an important construct in the integration and adoption of online learning. Karen et al. (2015) conducted a study on improving pre-service teachers' readiness to integratetechnology with cross-curricular adaptations. Pre-service teachers preparing to teach in twenty first century classrooms must recognize the call for greater student engagement, enhanced critical thinking, and authentic, real-world application. Additionally, the data supports the concept that pre-service teachers feel that technology can and should be readily implemented into future classrooms, thus, they are ready to adopt technology and online learning. Several literature have reported pre-service teachers' readiness to adopt online learning (Hung et al 2010; Tam & Lim, 2013, Cigdem & Yildirim, 2014).

Statement of the Problem

The 21st Century Students has been described as digital natives. Students of nowadays (Technical Education students inclusive) are constantly yearning for a more ICT based method of teaching and learning rather than the traditional method. It has been observed that an average Technical Education students in this era, spends more time on the internet especially social networking sites than reading books. Researchers reported that students of nowadays make more use of Web 2.0 technologies in their day to day activities. The quest to address the inadequacies of infrastructure and inadequate access to quality higher education is the drive for this study. Therefore, online learning, e-learning, and mobile learning have been advocated. Successful integration of online learning will depend on the perception, attitude and readiness of pre-service teachers. Consequently, pre-service teachers positive or negative perception and attitudes could lead to the integration of online learning.Consequently, pre-service teachers positive or negative perception and attitudes could lead to the integration of online learning. On the contrary, teachers' negative perception could lead to poor integration of online learning. Furthermore, Katsina State where the study is being carried out is in the Northern part of Nigeria which is affected by bandits' attack and has left many in refugee camps, therefore, online learning could be the best alternative. The findings of this study could yield important data on the subject matter. Hence, this study examined the perception, attitude and readiness towards online learning among college of education pre-service teachers in Katsina State, Nigeria.

Research Questions

The study provided answers the following research questions:

1. What is the perception of pre-service teachers towards online learning in Katsina State?
2. What is the attitude of pre-service teachers toward online learning?
3. Are students in Colleges of Education in Katsina State ready for the adoption of online learning?

Research Methodology

The research design to be adopted for this study was descriptive survey research design, specifically cross-sectional type in which samples are selected and studies across the level or status.The population for this study comprises all NCE pre-service teachers from two Colleges of Education in Katsina State with the total number of 6,350. Purposive sampling technique was used to sampledtwo hundred and twenty eight(228) NCE I & II pre-service teachers from the two Colleges of Education in Katsina State out of 6,350 pre-service teachers.

The research instrument for this study was a questionnaire titled "Pre-service Teachers Perception, Attitude and Readiness towards Online Learning Questionnaire (PAROLQ)''. The instrument was divided into four sections; section A, consists of demographic information about the respondents. Section B consist of statement on pre-service teachers' perception towards online learning. SectionC consists of statements on students' Attitude of online learning.The questionnaire was a 5-point Likert type (Strongly Agree (SA), Agree (A),Undecided (U), Disagree (D), and Strongly Disagree (SD), with the scale of 5. 4, 3, 2,and 1 respectively.Section Dconsists of items on students' readiness to adopts online learning for teaching using Fully Ready (FR) awarded 5 points, Ready (R) awarded 4 points, Undecided (U) awarded 3 points, Partially Ready (PR) awarded 2 points and Not Ready (NR) awarded 1point scale.

The instrument was validated by four experts, two from the Department of Educational Technology, Federal University of Technology Minna, while the third validator from Science Education Department, Federal University of Technology Minna, the final validator from Department of Counselling Psychology, Ibrahim BadamasiBabangida University, Lapai. Finally, all experts agreed that the instrument is valid.A total number of 30 pre-service teachers from Federal College of Education Katsina, which are part of the population but not part of the sample for this study. The NCE III pre-service teachers of 2019/2020 session were used for pilot study. The data collected were analysed using Cronbach Alpha formula. The rule of thumb by GeogeandMalley (2003) stated that an alpha coefficient above 0.70 is considered acceptable. The reliability coefficient obtained for perception, attitude and readiness were 0.95, 0.86 and 0.78 respectively. This indicated that the instruments were reliable.

The researcher visited the schools with a letter from the Head of Department Educational Technology, Federal University of Technology, Minna to seek permission to use their schools and subject teachers. The researcher trained the research assistants on how to administer the instrument. The administration of the questionnaire lasted for 2 weeks.The completed copies of the questionnaires were collected from the respondents for further analysis.The research questions were answered using mean and standard deviation.

Results
Research Questions One
What is the perception of pre-service teachers on online learning in Katsina State?
To answer this research question, mean and standard deviation were used, and the results is presented in Table 1.

Table 1: Pre-service Teachers' Perception towards Online Learning

S/No	Item	N	Mean	Std. Deviation	Decision
1	Online learning activities take a long time to implement.	228	4.18	.85	Agree
2	Online learning influences pre-service teacher's interest in learning	228	4.20	.72	Agree
3	The evaluation criteria in the online learning are clear and understandable	228	4.40	.82	Agree
4	Online learning is in line with the syllabus of the subjects involved in school settings.	228	4.28	.91	Agree
5	Online learning system is easier than learning under traditional method	228	4.63	.96	Agree
6	Online learning encourages communication between teachers and students.	228	4.23	.95	Agree
7	Online learning creates opportunities for developing knowledge, skills and collaboration between teachers and students.	228	3.54	1.05	Agree
8	Online learning encourages collaboration between pre-service teachers.	228	4.16	1.13	Agree
9	Online learning can promote mutual assistance among pre-service teachers.	228	4.22	1.02	Agree
	Grand Mean		**4.20**		**Agree**

Table1 shows the mean and standard deviation of pre-service teacher's perception on the use of online learning. The respondents are in agreement with the items stated the research instrument on pre-service teacher's perception on the use of online learning. The items mean range between 3.54 and 4.63 are all considered accepted based on the decision mean of 3.0., the grand mean 4.20. This implies that, pre-service teacher's perception on the use of online learning is positive and favourable since all items on pre-service teacher's perception on the use of online learning show agreed based on the decision mean. The standard deviation of pre-service teacher's perception on the use of online learning was between 0.72 - 1.13, indicating that there is no significant standard deviation mean of respondents' and the standard deviation mean of the group.

Research Question Two
What is the attitude of pre-service teachers toward online learning?
To answer this research question, mean and standard deviation were used, and the results is presented in Table2.

Table2: Pre-service Teacher's Attitudes towards Online Learning

S/N	Items	N	Mean	SD	Decision
1	Information obtain on online learning are never misleading.	228	4.30	.90	Agree
2	Interaction on online learning is entertaining.	228	4.23	.82	Agree
3	I get useful information on diverse areas on online learning	228	4.13	.97	Agree
4	I feel it is important to find any information whenever i want on online learning.	228	4.30	.92	Agree
5	I feel it is important to be able to access various online learning platform any time.	228	4.23	1.02	Agree
6	It is important to keep up with the latest information about my discipline on online learning.	228	3.93	1.18	Agree
7	I regularly use online learning because I find information I gathered through them useful.	228	4.19	1.07	Agree
8	I feel interaction on online learning enhances learning processes.	228	4.29	.82	Agree
9	Online learning makes me build intimate relationship with people.	228	4.22	.87	Agree
10	Online learning allows me to interact with my professional friends.	228	4.17	.92	Agree
11	I feel confident in using online learning.	228	4.18	.96	Agree
12	I believe that online learning gives me the opportunity to acquire new knowledge.	228	4.21	.99	Agree
13	I believe that online learning enhances my learning experience.	228	4.10	1.10	Agree
14	Online learning increases the quality of living because it integrates all	228	4.00	1.04	Agree

S/No		N	Mean	Std.	Decision
	form of media.				
15	Adopting online learning allows for increase pre-service teacher's satisfaction.	228	3.94	1.16	Agree
16	It is interesting to study course that uses online learning or information.	228	4.40	.912	Agree
	Grand Mean		**4.17**		Agree

Table2 shows the mean and standard deviation of pre-service teacher's attitudes towards online learning. The respondents are in agreement with the items stated in the research instrument on pre-service teacher's attitudes towards online learning. The items mean range between 3.93 and 4.40, while standard deviation of between 0.82 and 1.18. Therefore, all items were considered accepted based on the decision mean of 3.0. The grand mean of 4.17 implies that, pre-service teacher's attitudes towards online learning is positive.Similarly, the standard deviation of pre-service teacher's attitudes towards online learning indicates that there is no substantial standard deviation mean of respondents' attitudes and the standard deviation mean of the group.

Research Question Three
Are students in Colleges of Education in Katsina State ready for the adoption of online learning?
To answer this research question, mean and standard deviation was employed and the result presented in table 3
Table3:Pre-service Teacher's readiness to adopt Online Learning

S/No	Item	N	Mean	Std. Deviation	Decision
1	I like to use my own phone for online assignment	228	4.33	.96	Agree
2	I am confident when using my phone for online learning	228	4.21	.94	Agree
3	Online learning provides me with new methods to learn	228	4.29	.90	Agree
4	Online learning will bring new opportunities for learning among teachers and students	228	4.21	.88	Agree
5	Online learning can save my time	228	4.25	.86	Agree
6	I find online learning easy, as it is possible to learn what I want	228	4.03	.98	Agree
7	Online learning enables me to get feedback morequickly than before	228	4.08	1.06	Agree
8	Online learning is more flexible than traditional learning; it can becarried out at any time, and anywhere	228	3.97	1.07	Agree
9	It is possible to achieve personal educational aims through online learning	228	4.20	1.05	Agree
	Grand Mean		**4.17**		Agree

Table 3 shows the mean and standard deviation of pre-service teacher's readiness to adopt online learning. The respondents are in agreement with all the items in the research instrument on pre-service teacher's readiness to adopt online learning. The items mean range between 3.97 and 4.63 are all considered accepted based on the decision mean of 3.0., and the grand mean is 4.20. This implies that, pre-service teachers areready to adopt online learning.The standard deviation of the pre-service teacher's readiness to adopt online learning is between 0.86 - 1.07, indicating that there is no substantial deviation mean of respondents' perception and the standard deviation mean of the group.

Discussion of Results
The finding of research question one indicates that pre-service teachers incolleges of educationin the population have positive perception of online learning. This finding collaborated the earlier results of Mustafa (2015) whoinvestigates students ' perceptions of the use of online learning among university students in Al Ain University of Science & Technology. The results showed that students perceive technologyto attracts attention and facilitates learning and its ease of useprovided them with equal learning opportunities and improved their performance. The result also agree with Chaka & Govender (2017) investigated students' perception and readiness towards mobile learning in colleges of education in Nigeria.

The finding of the study also shows that Pre-service teachers of college of education have positive attitudes towards online learning. The finding concurs with Obaid (2017) who concluded that undergraduate students have positive attitudes towards online learning. Similarly, the finding also agrees with Kaplan-Leiserson (2015)whose results result shows that students have positive attitude towards the usefulness of e-learning. The reason for student positive attitudes could be attributed to the fact that online learning offers the students opportunity for a shift from the passive learners in traditional classroom to active inquirers in online learning.

The result of research question three indicates that pre-service teachers of college of education are ready to adopt online learning. The finding agrees with Karen *et al.* (2015). Conducted a study on improving pre-service teachers' readiness to integratetechnology with cross-curricular adaptations. The findings show that pre-service teachers are ready to adopt technology and online learning. the result also agrees with Cigdem,&Yildirim,(2014) who reported that vocational students have higher readiness for online learning. It could be logical to assume that the positive level of pre-service teacher's readiness could be attributed to their positive perception and positive attitudes toward online learning.

Conclusion

Pre-service teachers preparing to teach in twenty first century classrooms must recognize the call for greater student engagement through online learning. Therefore, it will be logical to conclude that the data supports the concept that pre-service teachers feel that technology and online learning can and should be readily implemented into future classrooms.Thus, they have positive perception and attitudes towards online learning and are ready to adopt it.

Recommendations

The following recommendations were made:

- Conducive environment should be provided for effective implementation of online learning.
- Online learning should be integrated into the curriculum of pre-service teachers in Nigeria.
- The internet is a major driver of ICT in education and bandwidth is a major issue in the deployment of online learning. Therefore a priority for high internet bandwidth should be given attention.

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