

ONLINE TEACHING AND LEARNING STRATEGIES IN TEACHER EDUCATION

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Abstract

In our modern time, teaching is gradually shifting from traditional classroom to online teaching. Sometimes for one reason or the other, which could be personal or man-made, the teacher may not be able to meet with the students face to face. In such situation, the teacher organizes an online class wherein teaching and learning is done using different virtual networks. This paper describes the use of online teaching and learning strategies in teacher education. It examines the benefits of online teaching for both teachers and students, presents a framework for incorporating online teaching into teacher education, and identifies challenges that may arise when implementing online teaching and learning strategies. It concludes with a discussion of the implication for teacher educators and recommends strategies for increasing the effectiveness of online teaching and learning strategies in teacher education.

Key words: Online teaching, learning strategies, teacher education

Introduction

Online teaching and learning strategies are the modern technological means that teachers can adopt to keep teaching and learning going in our academic environment. The traditional face to face teaching and learning environment is teacher centred. The teacher controls the delivery of course contents but with the online teaching method, a learning environment that is controlled or negotiated by the learner is established. A learner-centered online classroom has the ability to enhance the interactivity and collaboration of the learner. The technology according to McVay et al should provide “the mechanism through which the online teacher implements the best pedagogy for that course or topic”. E-learning theory is built on cognitive science principles that demonstrate how the use and design of educational technology can enhance effective learning (David, 2015; Wang 2012). E-learning theory belongs to the grand theory of Connectivism because it emphasizes how technologies can be used and designed to create new learning opportunities and to promote effective learning. Connectivism as propounded by George Siemens and Stephen Downes is a relatively new learning theory that suggests students should combine thoughts, theories, and general information in a useful manner. It accepts that technology is a major part of the learning process and that our constant connectedness gives us opportunities to make choices about our learning. It also promotes group collaboration and discussion, allowing for different viewpoints and perspectives when it comes to decision-making, problem-solving, and making sense of information. Connectivism promotes learning that happens outside of an individual, such as through social media, online networks, blogs, or information databases.

The Concept of Online Teaching

Online teaching is the process of educating others via the internet from any location. It could be from the home, office, relaxation centre or any convenient place outside the formal classroom using various methods such as WhatsApp, Facebook, live classes, group video calls, webinars, by enrolling students from various backgrounds and geographical areas. The online applications are developed and designed to facilitate easy learning and better understanding. The advancement in technology has improved the quality of distance education and increased the trend of e-learning. Teachers can use online teaching apps that offer a host of brilliant features and transform the way topics are being taught to the learners.

These online teaching processes according to Wikipedia are computer mediated technologies that facilitate the creation and sharing of information, ideas, career interests and other forms of expression via virtual communities and networks. According to Ikegbusi, (2016), ICT is a revolution that involves the use of computers, internet and other telecommunication technology in every aspect of human endeavour. The author posits that ICT is simply about sharing and having access to data with ease. It is regarded as the super highway through which information is transmitted and shared by people all over the world. The field of education has certainly been affected by the penetrating influence of ICT worldwide and in particular developed countries. ICT has made a very profound and remarkable impact on the quality and quantity of teaching, learning and research in the educational institutions. Information and communication technology has the potentials to accelerate, enrich, and deepen skill; to motivate and engage students in learning to help relate school experiences to work practices; to help create economic viability for tomorrow's workers; contribute to and provide opportunities or connections between the school and the world (Watson, 2010).

Bransford (2014) and Brosnan (2014) note that ICTs are increasingly playing significant roles in organisation's and society's ability to produce, access, adopt and apply information. They are however being heralded as the tools for the post-industrial age and the foundations for a knowledge economy due to their ability to facilitate the transfer and acquisition of knowledge. Stressing the importance of the use of ICTs in schools, Okafor (2014) notes through ICTs, educational needs have been met; it changes the needs of education as well as the potential processes. Messages can be communicated through the e-mail, telex or telephone, especially the mobile ones. Furthermore, the use of ICTs in education also shifts the learning approaches. As put by Bransford, Brown & Cocking (2014), there is a common belief that the use of ICTs in education contributes to a more constructivist learning and an increase in activity and greater responsibility of students.

The pervasiveness of ICT according to Yusuf (2005) has brought about rapid technological, social, economic and political revolution, which has eventuated in a network society structured around ICT. The author goes further to say that ICT is an indispensable part of teaching and learning processes as its application makes teachers more efficient and productive, thereby engendering a variety of tools to enhance and facilitate teachers' pedagogical activities. On this note, Ikegbusi (2016) states that e-learning is becoming one of the most common means of using ICT to provide education to students both on and off campus by means of teaching online offered via web-based systems.

Some prominent examples of social media, which are part of ICT, according to Rouse (2017) include the following:

Facebook is a popular free social networking website that allows registered users to create profile, upload photos and videos, send messages, and keep in touch with friends, family and colleagues.

Twitter is a free microblogging service that allows registered members to broadcast short posts called tweets. Twitter members can broadcast tweets and follow other users by using multiple platforms and devices.

Google plus is Google's social networking project designed to replicate the way people interact offline more closely than is the case in other social networking services.

Wikipedia is a free, open content online Encyclopedia created through the collaborative effort of a community of users known as wikipedians. Anyone registered on the site can create an article for publication.

According to a publication released from the office of the Vice Chancellor for Undergraduate Education, Berkely, University of California, the Committee on Courses of Instruction (COCI), recognize that social media are embedded into the lives of many 21st

century students. According to COCI, the use of social media as a communication channel can help create a collaborative learning environment and engage students in a discussion of course topics in a more dynamic and current, authentic way. Bill Pelz (2009), a Professor of Psychology and Sloan Consortium *Award for Excellence in Online Teaching*, provides three principles of effective online pedagogy, which include:

- Principle 1: Let the students do (most of) the work. The more time students spend engaged with the content, the more they will learn.
- Principle 2: Interactivity is the heart and soul of effective asynchronous learning.
- Principle 3: Strive for presence: social, cognitive, and teaching presence.

Teacher Education

Teacher education is any of the formal programs that have been established for the training of teachers at elementary and secondary school levels. As stated by National Council for Teacher Education (1998) in *Quality concerns in Secondary Teacher Education*, the teacher is the most important element in any educational program. It is the teacher who is mainly responsible for implementation of the educational process at any stage. This shows that it is imperative to invest in the preparation of teachers, so that the future of a nation is secure. The importance of competent teachers to the nation's school system can in no way be overemphasized. The National Curriculum Framework (2005) places demands and expectations on the teacher, which need to be addressed by both initial and continuing teacher education.

It is well known that the quality and extent of learner achievement are determined primarily by teacher competence, sensitivity and teacher motivation. The National Council for Teacher Education has defined teacher education as – A programme of education, research and training of persons to teach from pre-primary to higher education level. Teacher education is a programme that is related to the development of teacher proficiency and competence that would enable and empower the teacher to meet the requirements of the profession and face the challenges therein. According to Goods Dictionary of Education, Teacher Education means all the formal and non-formal activities and experiences that help to qualify a person to assume responsibilities of a member of the educational profession or to discharge his responsibilities more effectively. In 1906-1956, the program of teacher preparation was called teacher training. It prepared teachers as mechanics or technicians. It had narrower goals with its focus being only on skill training. The

perspective of teacher education was therefore very narrow and its scope was limited. As W.H. Kilpatrick put it: Training is given to animals and circus performers, while education is to human beings.

Teacher education encompasses teaching skills, sound pedagogical theory and professional skills.

Teacher Education = Teaching Skills + Pedagogical theory + Professional skills.

Teaching skills would include providing training and practice in the different techniques, approaches and strategies that would help the teachers to plan and impart instruction, provide appropriate reinforcement and conduct effective assessment. It includes effective classroom management skills, preparation and use of instructional materials and communication skills. Pedagogical theory includes the philosophical, sociological and psychological considerations that would enable the teachers to have a sound basis for practicing the teaching skills in the classroom. The theory is stage specific and is based on the needs and requirements that are characteristic of that stage. Professional skills include the techniques, strategies and approaches that would help teachers to grow in the profession and also work towards the growth of the profession. It includes soft skills, counseling skills, interpersonal skills, computer skills, information retrieving and management skills and above all life- long

learning skills. An amalgamation of teaching skills, pedagogical theory and professional skills would serve to create the right knowledge, attitude and skills in teachers, thus promoting holistic development.

Learning Strategies

A learning strategy is an individual's way of organizing and using a particular set of skills in order to learn content or accomplish other tasks more effectively and efficiently in school as well as in non-academic settings (Schumaker & Deshler, 1992).

Learning strategy instruction focuses on strategies that facilitate the active learning process by teaching students how to learn and how to use what they have learned to solve problems and be successful.

These strategies involve teaching how to develop a plan for studying for a test, monitoring understanding of the content, clarifying the materials, and evaluating work. This type of self-regulated learning is the key to successful life-long learning and includes the development of such strategies as goal setting, self-instruction, and self-monitoring. (Graham, Harris, & Reid, 1992)

Online teaching strategy is a student-centred methodology that increases students' interest and participation levels in virtual classrooms. The teaching skills play a great role in successful interaction with the students. Teachers have to polish their communication skills in order to ensure that student engagement is on point. You should create a positive learning environment and incorporate various classroom activities and games to make sure that the students are attentive. It is a misconception that it is difficult to tackle student focus in online classrooms. All you have to do is understand that online classrooms are significantly different from traditional classes and alter the methods and strategies accordingly.

Online teachers use digital resources to share with their students and are accessible to so many people. It provides a lot of freedom to individuals to learn, teach, and develop skills at their own pace. This type of teaching supports one-on-one basis interaction with the students. It makes them comfortable with tough subjects. Teaching online requires strong network connectivity and computing device systems. Nowadays, more mobile applications are developed as they are easily accessible by a large population. The mobile versions of the live teaching apps have helped in increasing the attendance and registration of students. The following are some strategies that can be incorporated in the online English and literature teaching.

Incorporating online teaching using Content and Language Integrated Learning (CLIL):

The CLIL approach principally involves studying one subject (for example, literature in English) and learning a language, such as English, at the same time — effectively integrating the two subjects. The language teaching is organized around the demands of the first subject rather than that of the target language. So it's critically important to make sure that the integration is clear and that students are engaged. Having said that, the CLIL approach does create significant opportunities for cross-curricular working; it opens up language learning to a wider context and can be used to re-engage previously demotivated students. For instance, the topic 'Phonetic Transcription' can be taught alongside with literature in English. The teacher can choose a particular drama text and make the students dramatize it taking cognizance of the correct pronunciation of words. The students can be grouped and each group would be made to dramatize and send to the group chat for critique.

Incorporating online teaching using Audiolingual method: Audio-lingualism is a method of foreign language teaching where the emphasis is on learning grammatical and phonological structure, especially for speaking and listening. It is based on behaviourism and so relies on formation as a basis for learning, through a great deal of mechanical repetition. The teacher spends most of the time in the class drilling the learners on grammatical and phonological structures. Error correction is also important. Using the zoom, the teacher can bring out different sounds of the English language and drill the students on them. As the teacher does so, the students repeat after her. Again, the students can pronounce the words in their own voice, record and send to the group chat. After listening, the teacher reinforces correct pronunciations and makes corrections where necessary.

Incorporating online teaching using Grammar-Translation Method: This is a very traditional teaching approach which prioritizes translation from the students' mother tongue into the target language and vice versa. To succeed in this approach, students need to memorize long lists of vocabulary and detailed grammar formats and rules. The approach favours accuracy over fluency and tends to favour the development of reading and writing skills instead of speaking skills. The downside of this approach is that it does not prepare students with spontaneous communication skills. Classroom activities therefore usually include grammar drills, vocab tests and encouraging students to incorporate new grammar concepts in standardised writing tasks. The language teacher can teach essay writing using this method. After teaching the different types of essay using the Zoom or WhatsApp platform, the teacher can give the students sample essays and then encourage them to write theirs and send to the group chat for peer review.

The Benefits of Online Teaching and Learning Strategies in Teacher Education

The following would be achieved if student teachers are taught using the above methods and approaches to make them better teachers:

- **Covering of Syllables:** It is a well established fact that the syllables for the English courses and some other courses are usually broad. For instance, there are different aspects like essay/letter writing, comprehension, objectives, summary writing and oral English. The teacher is expected to cover these aspects before the examination. Using the online teaching strategies would help teachers to touch all the different aspects of the language and get the students ready for exams.
- **Students' Participation:** Most times students find reading and writing very difficult but if some topics are taught using the social media, the interest of the lazy students would be ignited and they would end up enjoying the subject.
- **Individualized learning:** If social media is used in teaching the English language, students can enter the internet at their convenience and learn. For instance, assuming the teacher bought a video of debate by students and share it through the class group chat on WhatsApp or Facebook, the student teachers could be instructed to watch it at home and then come to the class for group discussion. This way, they would discover a lot of points and ideas about the topics before coming to the class for a group discussion.
- **The Students Can Study at their Own Pace**
Because most schools have resorted to online teaching, student teachers can enter the internet at their convenience and learn. For instance, the teacher can prepare lecture material on topics they are expected to cover for the term and share it through the class

group chat on WhatsApp or Facebook, the students could be instructed to read those materials thoroughly at home and then come to the class for group discussion. ICT provides a great flexibility in education to ensure that learners are able to access knowledge regardless of space and time (Akele, 2013). As a result, it can foster the educational and special needs of the students since it can be utilized at their own pace. Kok, (2007) observed that using ICT helps students to communicate, share ideas, and work as a team anywhere, anytime.

- **It Keeps the Students Busy:** During the total lockdown following the COVID 19 Pandemic, in the state and some occasional sit at homes especially on Mondays, students and their teachers were all confined to their homes. The online teaching and learning draws the attention of the students during this period. It helps to curb some crimes that are being perpetrated by youngsters in the society. During lockdowns occasioned by kidnappings and unrest in our society, teachers can use the same already existing platforms to keep the students busy.

Challenges of Online Teaching and Learning in Teacher Education

The following are some of the challenges that may be encountered as regards utilizing online teaching in teacher education.

Epileptic Power Supply

Epileptic power supply is one of the challenges as regards embracing e-learning in Nigeria. This has been a lingering issue over the years in Nigeria especially in rural areas. There is no guarantee of steady power supply for at least six hours. This problem has affected so many aspects of human endeavours in the country; the education sector inclusive. As a result of the closure of schools, most students who reside in rural villages travelled back to their villages and most villages in the rural areas are not even connected to power supply at all. As a result, this category of student teachers will experience difficulty keying in to the e-learning platforms effectively. In urban areas where residents are connected to the source of power, its paucity brings about difficulty in powering of the educational gadgets like laptops, desktop computers, smartphones, etc. needed for learning.

High Cost of Data and Internet Devices

High cost of data and internet devices are also one of the major obstacles to e-learning in Nigeria. Most times the internet services required to connect to the e-learning platforms require a lot of data and the cost of purchasing such data bundles are on the high side thus making it difficult for both teachers and students to purchase. Sometimes the internet services are usually so poor especially when it comes to Zoom, Skype, Video Conferencing and the likes where both the teachers and the students are expected to interact. Again the internet devices needed for the online lectures like laptops, desktop computers, smartphones, etc. are on the high side considering the low income level of an average civil servant in the country. Few students who can afford the gadgets do experience difficulties due to poor internet facilities. This poor internet facilities and high cost of its devices may result in poor attendance of students during the online classes. This however can be linked to the poverty situation in the country as some families might not be able to afford basic needs such as food and clean water let alone the expensive gadgets or resources to sustain them for online learning.

Attention Divert

Despite the fact that there are so many advantages inherent in using the social media to teach during the post pandemic era, the attention of students may be diverted to pornography and other horrible sites. This is because the internet contains some junk and obscene sites which, if not regulated and censored before students are allowed to work on it can lead to all forms of moral decadence, especially among teenagers and youths. In this case, teachers and parents are advised to monitor the activities of the students as they consult the social media sites and also make them to understand the danger of consulting horrible sites at their age.

Teachers' Lack of Computer Knowledge

In some institutions, lecturers lack internet knowledge and as a result, keying into the online programme becomes a challenge. Some teachers in secondary schools are very much at home with the traditional classroom teaching method. A good number of them do not have smart phones talk more of going online for any business. Such teachers resort to the services of online business centers for uploading their learning materials during online lessons. Those categories of teachers are known as analogue teachers who find it difficult to change with the system. Because they have refused to change with the modern trend, the outcome remains that they will find it very difficult to cope with online lessons.

Conclusion and Recommendation

Utilizing online strategies in teacher education is very important in our society where the teachers are at the fore front in imparting knowledge on the students. When the student teachers are properly trained using the different online teaching strategies, they will surely become better teachers that would in turn train other teachers. In ensuring that the student teachers are well grounded, the teachers can use the different methods and techniques of teaching using E-learning platforms like Zoom, Skype, Google play store, WhatsApp, Facebook, Telegram, etc. Using these online platforms to teach the student teachers in our schools will enable the students to study at their own pace, promote distance education, encourage feedback, keep students busy, etc. However, there are some disadvantages like epileptic power supply, high cost of data and internet devices, attention divert, teachers' lack of computer knowledge, etc. which may be encountered. In order to embrace online teaching strategies fully and enjoy its advantages in teaching the student teachers, the following should be taken cognizance of:

- Teachers and students should be encouraged to be computer literate because using the online teaching strategies demands that one must be proficient in the use of computer.
- Computers and tablets should be supplied to schools to ease teaching and learning using the online strategies.
- Basically, power supply is usually a stumbling block as regards using the online gadgets. The school authorities must ensure that there is twenty- four-hour power supply in schools.
- Curriculum planners should ensure that learning materials are produced in soft copies to ease teaching and learning.
- Teachers should put in their best to ensure that the students are at home with the subjects.
- As they use the online strategies, the teachers should monitor the student teachers to ensure that they do not deviate from their focus.

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