A Comparative Study of Flipped-Learning and E-Learning in ELT Teacher Education

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Abstract   *Advancement in technology has brought a positive change in pedagogical practices. The development started with the integration of technology as a tool for teaching and has reached e-learning and Flipped-learning. In this study, the features of e-learning and Flipped-learning are compared from the perspective of technology and pedagogy in practice. To collect the data, English language teachers of public sector colleges and universities, who had attended online courses and blended courses, were selected for focus group discussion through purely judgmental sampling. The questions for focus group discussion were based on the Stephen Bax's (2003) criteria to compare different phases of CALL. The research highlights that flipped-learning gives more support and freedom to the learner to work at his own pace, whereas e-learning gives more opportunities for independent learning. There is no face-to-face interaction in e-learning, whereas, in flipped-learning, the learners get a chance to interact in real-time. The participants of e-learning courses were urged to incorporate some sort of real-time interaction, whether online or face-to-face.*

Key Words:
E-Learning, Flipped-Learning, Pedagogical Approach, Technology Integrated, Synchronous, Asynchronous

Introduction

Learning outcome is the ultimate focus of any education system. It is meant to manage the curriculum in such a way that its learners learn the target content in a capacity to utilize it in their practical life meaningfully. To achieve this objective, different pedagogical practices have been introduced and applied at different times for multiple types of learners. In the 20th century, after the introduction of technology, the traditional classrooms were customized by integrating technology in the physical classrooms to maximize learning and to make it empirically more effective. In technology, integrated classrooms technology was used as a tool or as an audio-video aid to support and enhance learning. According to Bax (2003), "in integrative approaches, students learn to use a variety of technological tools as an ongoing process of learning."

This customization continued to achieve the core objective of education, and at the verge of the 20th and 21st century, along with technologically enhanced learning as well as technologically integrated learning, e-learning also got popularity amongst education circles. E-learning is learning or accessing education through electronic technologies. E-learning was introduced after the invention of the internet, as it is a form of distance learning in which communication between the tutor and the learner and amongst learners is possible only through the internet. In e-learning, *students interact with teachers, asking for tutoring services and questions on topics, as well as students also communicate with their peers. Students have access to technological media that enable them to participate in several groups of knowledge.* (Aparicio, 2013). The emergence of e-learning made education more globalized and also expanded free access to education.

However, e-learning is a sort of replication of traditional classrooms in certain aspects. As in e-courses, also, the students are expected to read the material sent by the tutor, carry out the assignments, accordingly, participate in the assessment tests on a regular basis and meet the deadlines. E-learning requires certain software to be downloaded on the computer of the learner to make him/her access the online platform for learning. In e-learning, the learner has more autonomy, and the tutor just organizes the learning environment. The learners also have to participate in the discussions and conduct some sort of research in e- courses. Subsequently, tutors assess and evaluate their learning.

There are some problems related to e-learning that have been observed by the e-learners as well as the researchers. For example, in the process of e-learning, the communication is asynchronous, and there is comparatively less support and facilitation from the tutor. Secondly, there is no real-time interaction between learners and tutors in some e-learning practices. The online sessions with the tutor, if there are any, are just in the form of video-recorded lectures that do not develop any type of critical thinking or conceptual understanding among the learners.

The experiments with e-learning proved that real-time interaction with the teacher or tutor is also required for true learning. As in e-learning through the learners are autonomous, and they can work at their own pace and can learn through research; still, they need an environment like a physical classroom in which they can interact with the teacher as well as with their peers to develop their critical thinking and share their knowledge. Consequently, this realization gave way to blended learning, also known as flipped learning. Flipped learning is a pedagogical approach that is a combination of traditional physical classroom and e-learning, but it has shifted the centre of the classroom from the teacher to the learner. Flipped Learning Network (2014) defines flipped learning as: "a pedagogical approach in which direct instruction moves from the group learning space to the individual learning space and the resulting group space is transformed into a dynamic interactive learning environment where the educator guides students as they apply concepts and engage creatively in the subject matter."

Some people may confuse flipped learning with flipped classroom. Flipped Learning Network (2014) has clarified this confusion by defining the four pillars of flipped learning. In the flipped classroom the teachers assign their learners some study material or videos etc., to read and watch before coming to the classroom, and when they come to the classroom, they are engaged in discussions and other such activities that can develop their critical thinking. Assigning supplementary reading or videos can be done through online digital resources or without that. Whereas, flipped learning is a type of learning environment in which teacher is flexible about expectations of the students' timeline and assessment of their learning. The mode of instruction is usually shifted to learner-centered approach where learners explore the content in more depth and construct their knowledge through participation in different creative and critical activities. Teachers who adopt flipped learning, besides developing the concepts of their learners, provide their learners opportunities to think critically and creatively, give them feedback and assess their work accordingly.

Flipped learning may be an old pedagogical approach, but a new 21st-century term. Flipped learning in this age of technology is also known as blended e-learning. Many studies have been conducted in the past eight years on the effectiveness of flipped learning and on the comparison of traditional classrooms and the flipped classrooms. Some researchers like Kashada (2014) have worked on the challenges of flipped learning and some have conducted the experimental studies to study the efficacy of flipped classrooms for developing learning. However, the researchers have hardly found any research in which the flipped learning has been compared with e-learning. The reason behind this may be that as the flipped learning phenomenon has emerged with the development of technology, the professionals who are practising flipped learning use electronic online resources to manage the outside classroom material sharing, therefore, blended e-learning may be confused with flipped-learning.

Rationale for the Study

The current study is aimed at finding the features of flipped learning that are shared by e-learning and identifying the areas in which the flipped learning may be different from e-learning. The aspect of the study that makes it different from the previous studies in the field is that these pedagogical approaches are being explored through the feedback of the ELT professionals whose pedagogical skills have been developed through these approaches. Many descriptive and experimental studies have been conducted to explore the application and effectiveness of e-learning and flipped learning, separately, in different fields of education. Some content analysis studies have also been conducted to find out what other researchers have explored about these areas of learning. The current study will focus on the application of e-learning and flipped learning in teacher education. The study will highlight the similarities and differences in the features of both types of learning environments.

This study will help the researchers and the ELT professionals to identify features of flipped-learning that make it different from e-learning. The study will help the ELT professionals to recognize their role in flipped learning and will assist them in designing such activities for their learners that shift the focus of teaching from the teacher to the learners, and that could make their learners develop their critical thinking and problem-solving skills in a more flexible environment.

Research Questions

The current study is conducted to answer the following questions:

i.   What are the tasks carried out by the ELT professionals in the e-courses; how similar and different they are from the courses conducted through flipped learning approach?

ii.   What are the tutors and learners' activities in flipped learning and e-learning modes of education?

iii.   What is the position of computer and the internet in e-learning and flipped learning modes of education?

Scope of the Study

The current study is designed to find out the distinguishing features of e-learning and flipped-learning in ELT teacher education. There are many platforms that provide ELT teachers opportunities to develop their professional skills. Some of the platforms are purely e-learning platforms that manage distance teacher education courses through online classrooms and some of them promote blended and flipped-learning, in which some of the tasks are managed from distance through online resources and some of the sessions are conducted in real time, face to face. However, the study will take into account only selective massive online courses like Teaching Grammar to young learners, courses offered by US state department through E-teacher Scholarship program and international resource person courses organized by HEC, Pakistan like Research Methods and Transforming English Language Skills (TELS). The data for the study will be gathered from the ELT professionals who have attended these courses.

Literature Review

Technology has affected our life in multiple ways. Living in the digital world and being the digital natives, we have normalized and naturalized technology in almost all domains of our lives. Teaching and learning is also one of the important domains of our lives that have been affected by technology. E-learning and flipped-learning are the latest trends in the teaching and learning contexts, and are also known as pedagogical approaches being applied for effective learning.

Many researchers have studied e-learning and flipped-learning in different teaching learning contexts. E-learning refers to any electronically assisted instruction and is often associated with instruction offered via computer and the internet. (Li, 2014) In e-learning, learning is facilitated by transmission of knowledge and through managing autonomous learning by the learner. Flipped instruction on the other hand requires self-directed learning outside the classroom through discovery and experimentation, not necessarily under the supervision of an instructor (Karaaslan, 2017). According to Balaji (2018), in a flipped-learning environment learners "study at their home using the modern technology, such as listening to screencasts of the teacher, and they will do practical assignments, such as debates, discussions and problem-solving, in the classroom."

To be successful in flipped-learning, people need to have the ability to manage their own learning and to develop critical thinking that will ensure that they are confident at communicating with the web in order to engage, participate, and get involved with learning activities. Learners also need to have ability and competence of using different tools in order to engage in meaningful interaction. There are critical abilities, such as collaboration, creativity, and a flexible mindset, that are "pre-requisites for active learning in a changing and complex learning environment without the provision of too much organized guidance by facilitators" (Kop, 2011)

Flipped-classroom is mostly used in science subjects and there is lot of research on the use of flipped-learning in science subjects, but it has been rarely applied or experimented in a language classroom. Balaji (2018) has experimented this approach for teaching language in ELT classroom. He hypothesized his study as, "by flipping the classroom in ELT context, a teacher can successfully ingrain difficult concepts such as active voice or indirect speech into slow bloomers."

Different researches have been consulted to get information about e-learning and flipped-learning. Most of them focus on e-learning and flipped--learning separately. Some of them have based their research on comparative study of flipped-learning and the traditional classroom. The current study is focused on comparing e-learning with flipped-learning in ELT teacher education to see how effective both the strategies are in teacher education and how similar and how different are the experiences of the ELT professionals who have experienced them.

Research Methodology

This research is descriptive in nature and follows qualitative approach to highlight the features of flipped-learning and e-learning. Focused group interviews technique was applied to gather data from ten ELT professionals to explore the similarities and differences in the features of flipped-learning and e-learning. As the current study is aimed at exploring flipped-learning and e-learning in ELT teacher education therefore, the population for the research is ELT professionals who have attended ELT training courses managed through electronic environment and flipped-learning.

Ten ELT professionals have been selected as a sample to participate in focused group interviews and to select

the requisite sample non-probability, purposive sampling technique was used as the researchers have used their own judgment to select those ELT professionals to gather data who have attended certain ELT training courses through e-learning as well as flipped learning. Three of the participants participated only in e-learning, three of them participated online in flipped-learning and four of them had the experience of both. The instrument or tool to gather data was focused group interviews along with observations by the researchers. The researchers have designed certain questions to guide the focus group discussion (as attached in Appendix) and took help from colleagues to manage the interviews using said questions. The researchers recorded the responses of the participants of the focused group interviews for analysis to draw conclusions of the study.

To design the guiding questions for the focused group interviews, the researcher adapted the Stephen Bax's (2003) criteria to compare different phases of CALL. To compare the three phases of CALL, restricted CALL, open CALL and integrated CALL, Stephen Bax suggested certain parameters on which these phases can be called and it can be observed how one phase is similar to or different from the other. Those parameters include:

- Type of task: What type of tasks or activities are done to cover the lesson.
- Type of student activity: What the students are supposed to do in those activities.
- Type of feedback: What type of feedback is given, correct/incorrect or some remarks, comments etc.
- Teacher roles: What role is performed by the teacher, monitor, guide, facilitator etc.
- Teacher's attitude: Is the teacher a conventional symbol of fear or he/she is friendly?
- Position in curriculum: Is computer integrated or only computer is used, or computer is used before content etc.
- Position in lesson: Whole CALL lesson, or lesson in parts
- Physical position of computer: Personal computer is used, or computer lab is used or only teacher uses the computer etc.

All of these criteria were not used. They were used only as a guideline to form the questions.

Data Analysis

Data gathered through interviews is presented in the form of a table in which responses of the participants have been recorded in the form of a table in which responses related to e-learning and flipped-learning for each question have been recorded in parallel to find out similarities and differences in their features. Then their responses have been discussed to reach to the conclusion.

In the following table, data gathered as responses to different questions related to the features of e-learning and flipped-learning is presented.

S. No	Guiding Questions	Responses	
		E-Learning	**Flipped-learning**
1	What was the duration of your course?	i. 8 weeks (MOOCs) ii. 10 weeks (E-teacher scholarship program)	i. 8 months (Research Methods) ii. 1 year (TELS)
2	What type of tasks did you do in the course?	i. Reading articles ii. Participating in the discussion (in form of writing our response to a question or other participants, views iii. Taking tests and doing assignments	i. Reading articles online to explore the concepts ii. Research to practice the concepts learnt online iii. Discussion in face-to-face sessions about what we learnt and the action research which we conducted in our own time
3	Were you involved in group work or individual work?	i. Usually individual work. ii. Only once got a chance to work in pair with another learner who was physically away.	i. Worked on our own, individually, when away the class working in our own pace. ii. Group discussion to evaluate one another's work
4	Did you get a chance to interact with your tutor and your peers?	i. Never had face to face interaction ii. Interaction through email or discussion board.	i. Online support from the tutors was always available. ii. Had 4-5 face to face sessions of one week each with the tutor and other peers

5	Were you engaged in some sort of research as a course completion requirement?	i. The final assessment was a research project. ii. One research project related to the topic	i. To complete the course, we had to complete an action research project (Research methods) ii. Develop materials for language teaching, selecting reading texts and designing activities (TELS)
6	What was the method of assessment and evaluation of your performance?	i. Quiz ii. Assignments iii. Mid-term test iv. Participation in discussion board v. Project work	i. No formal assessment ii. Evaluation of our research projects and guidelines about that iii. Evaluation of lesson plans and materials and oral feedback to improve
7	What method was applied to provide you the feedback on your performance?	i. Score and grades	i. Oral and written feedback on how to improve our work
8	What was the tutor's activity in the course?	ii. Uploading reading material iii. Giving and evaluating assignment iv. Assessing quizzes and midterm v. Giving deadlines for completion of task vi. Announcing the course completion	i. Directing towards the readings resources from where we could get help ii. Evaluating our work iii. Managing discussions and monitoring discussions iv. Giving feedback and support
9	How was computer and internet applied to the course?	i. Every activity was managed through internet. If internet access was not available course could not be completed	i. Internet was used to consult online resources and readings and interact and send our work to the tutors when he was away ii. Computer was used to compile our work
10	What type of development will you suggest to develop the course further for future participants?	ii. Many a times, there was a confusion or difficulty that the tutor was required to discuss and address but it could not be done. iii. Some type of face to face or online live interaction must be there between the tutor and the course participants.	i. Some of the participants of the course felt that there would have been some more face to face sessions. ii. The course provided us the ample space to develop learning at our own pace

Some observations made during the focus group discussion have helped the researchers to compare e-learning with flipped-learning. It was observed that the courses that were purely online were shorter as compared to flipped courses, as the duration of e-courses was 8-10 weeks, whereas flipped courses were usually eight months to one year long. In the e-courses the participants or the learners never got a chance of face-to-face interaction whereas in flipped-learning the face-to-face sessions were quite regular. The communication in e-learning was asynchronous, whereas in flipped-learning it was synchronous and including real time interaction. In e-courses the learners mostly worked individually, only once or twice they got a chance to work with other learners whereas flipped-learning is more collaborative as the learners worked on the materials by their own, but during the face-to-face sessions they had discussions in groups for more in-depth learning.

It was also observed that in flipped-learning the learners got plenty of time to conduct research, and their tasks were more creative and research oriented. Their work was evaluated for their further development and the feedback was not in the form of scores rather it was comments and points for further development, whereas in e-courses the learners tasks were more traditional like assignment, quizzes, reading and limited time for research, their work was assessed by the instructor and the feedback was in the form of scores that was quite intimidating, and what they did once was assessed and could not be improved.

In e-courses, as the whole learning is managed through internet, so the teachers' role is to assign reading, giving and assessing assignments and quizzes, uploading reading materials and students' score etc. On the other hand, in flipped-learning along with internet and computer, face-to-face discussions were also managed by the

teacher to develop critical thinking and analytical skills of the learners. The teacher's role was more like a guide and facilitator and mediator, as the teacher directed the learners towards readings and study materials, whereas the learners themselves search for the relevant material and used to read it to understand the concept, they used internet and computer to search for the relevant information and to compile their work. The teacher in the flipped-learning environment just directed the learners towards the study material, managed the discussions, mediated them and evaluated the learners' work and suggested improvement. Rest of the leaning was learners' responsibility that made them more autonomous.

The learners of the flipped-learning environment were quite satisfied with their learning, however, the participants of the e-courses wanted to have some more real time interaction with the instructor and the other students, whether it be through online platforms or it may be face-to-face.

Conclusion

It is however, concluded that both e-learning and flipped-learning are effective techniques in teacher education as both of them promote learner autonomy. However, flipped-learning promotes critical thinking and facilitation and support from the tutor as compared to e-learning. In flipped-learning, learning environment is more flexible; however, it is more systematic in e-learning. In flipped-learning the tutor performs the role of a manager, an evaluator, monitor and a facilitator as well as a guide. Whereas, in e-learning, the tutor is the manager and the evaluator. In e-learning the whole learning occurs through computer and internet, whereas, flipped-learning is a blend of interaction through computer as well as real life interaction for application of knowledge. If we evaluate them on blooms taxonomy, flipped-learning reaches to the level of application also. However, as suggested by the participants, if some sort of live interaction is also blended into the e-learning, it will be equally effective.

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Appendix

Questions for Focused Group Interviews:

1	What was the duration of your course?
2	What type of tasks did you do in the course?
3	Were you involved in group work or individual work?
4	Did you get a chance to interact with your tutor and your peers?
5	Were you engaged in some sort of research as a course completion requirement?
6	What was the method of assessment and evaluation of your performance?
7	What method was applied to provide you the feedback on your performance?
8	What was the tutor's activity in the course?
9	How was computer and internet applied to the course?
10	What type of development will you suggest to develop the course further for future participants?