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Использование интерактивного электронного перевернутого обучения для улучшения критического чтения студентов

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Проблема и цель. *Целью данной работы является исследование влияния интерактивного смешанного (перевёрнутого) обучения (e-based flipped learning) на формирование у студентов вуза навыков критического чтения и решения проблем.*

Методология. *В ходе исследования был проведен анализ влияния технологии смешанного (перевёрнутого) обучения на способность студентов к критическому чтению, а также выявлено отношение студентов к данной образовательной технологии. В рамках исследования был применён метод педагогического эксперимента, включающий входные и контрольные диагностические срезы. В исследовании приняли участие 34 студента, которые в течение 14 недель должны были посещать курс аналитического (критического) чтения, направленный на усовершенствование навыков восприятия текста. Недельная нагрузка по курсу составила 4 часа. Общая трудоёмкость курса была равна четырём академическим кредитам. Авторами были изучены ответы студентов на задания по критическому чтению. Причём, данные задания выполнялись студентами в рамках самостоятельной внеаудиторной работы с применением информационно-коммуникационных технологий. Задания включали дискуссии, обсуждения, выражение собственного мнения, а также взаимодействие студентов посредством социальных сетей. Тест на оценку навыков критического (аналитического) чтения был взят из материалов академического теста SAT (Scholastic Assessment Test). Уровень владения английским языком был диагностирован при помощи Oxford Placement Test (OPT) в начале исследования. Академический*

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тест SAT применялся для оценки динамики изменений навыков критического чтения в процессе реализации технологии интерактивного смешанного (перевёрнутого) обучения.

Кроме того, с целью выявления отношения студентов к образовательной технологии смешанного (перевёрнутого) обучения авторы использовали метод интервью (собеседования).

Результаты. *Смешанное (перевернутое) обучение является уникальной образовательной технологией, в рамках которой меняются местами задачи аудиторной и внеаудиторной образовательной деятельности. Реализуя модель продуктивного обучения (Output-driven), разработанную К. Вэном (Q. Wen), удачно воплощённую в технологии смешанного (перевёрнутого) обучения, авторы предприняли попытку усовершенствования навыков критического мышления студентов посредством вовлечения их во взаимодействие с применением информационно-коммуникационных технологий. В рамках педагогического эксперимента, в котором приняли участие 34 студента, обучающихся по направлению «Иностранный (английский) язык и литература», было сформировано 2 группы по 17 человек: экспериментальная и контрольная. Участники экспериментальной группы обучалось по технологии смешанного (перевёрнутого) обучения, в рамках которого было организовано их устное и письменное взаимодействие посредством информационно-коммуникационных технологий с целью усовершенствования навыков критического чтения. Обучение контрольной группы осуществлялось с применением традиционных методик. В ходе исследования было установлено, что студенты, обучавшиеся по технологии смешанного (перевёрнутого) обучения с применением информационно-коммуникационных технологий, продемонстрировали более высокие результаты, выполняя тесты для оценки навыков критического чтения. Качественный анализ отзывов показал, что студенты экспериментальной группы активно участвовали во внеаудиторном устном и письменном взаимодействии посредством информационно-коммуникационных технологий, что способствовало развитию навыков критического чтения.*

Заключение. *Результаты исследования показали эффективность использования технологии смешанного (перевёрнутого) обучения в преподавании иностранного (английского) языка, особенно в развитии навыков решения проблем и повышении самообразовательной компетентности студентов. Высокий уровень сформированности данных компетенций становится важнейшим условием выживания в современном меняющемся мире.*

Ключевые слова*: интерактивное обучение, электронное обучение, перевернутое обучение, критическое чтение.*

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Using interactive e-based flipped learning to enhance EFL literature students' critical reading

Abstract

Introduction. *The purpose of the study is to examine the effect of interactive e-based flipped approach on fostering students' critical reading and problem-solving skills.*

Materials and Methods. *An analysis was carried out on the effect of a flipped learning approach to examine the changes in students' critical reading ability and their perception towards it. A quasi-experimental pre-test-post-test design was used with 34 students attending a four-credit course of reading comprehension meeting for 4 hours per week for 14 weeks. Their responses when they were required to criticize a text beyond the setting of the classroom instruction, in a form of independent e-based reading activity was explored. Students' responses were based on meaning negotiation and interaction through social networks. A critical reading test was selected from the SAT website based on students' proficiency level which was identified through an OPT test at the beginning of the study. This test was used to investigate the changes, if any, occurring in students' critical reading ability as a result of engaging in interactive e-based flipped learning model of learning. Additionally, negotiated interview was used to explore students' perceptions toward this model of flipped learning.*

Results. *Flipped learning has emerged as a unique approach which reverses the traditional in-class lecturing and the role of homework and classroom activities. Using Wen's Output-driven/Input-enabled instructional model which is well embodied in flipped learning, the present study attempted to assist learners to develop their critical thinking skills through their engagement in interactive e-based activities. To this end, a pretest-posttest quasi-experimental design was used to investigate EFL literature students' critical reading skills. From 34 students attending a reading course at the University of Mazandaran, 17 students were randomly assigned to the flipped learning approach and were engaged in extensive online written and verbal communication for developing their higher-level reading skills.*

The rest were involved in traditional extensive reading assignments. Results indicated that students in the e-based flipped learning outperformed their traditional approach counterparts in the critical reading test. A qualitative analysis of students' perceptions revealed that these students participated actively outside the classroom in meaningful and collaborative written and oral activities via online networks which contributed to the development of their critical reading.

***Conclusions**. The results showed some distinct benefits for EFL language instruction especially in the development of problem-solving skills and autonomy, which are important traits for surviving in this fast-pacing world.*

Keywords

Interactive Learning, E-based Learning, Flipped Learning, Critical Reading.

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Introduction

Recently, the computer technologies are considered as an integral part of the educational systems. The bulk of research studies in this area indicates a growing use of technological tools such as Web 2.0 services, and microblogging, in particular, in the process of teaching foreign languages. Microblogging for example has been considered as an indispensable resource for the formation of communicative skills of students. Nurutdinova et al. (2018) [27] examined the interactive technology for teaching foreign languages and as an effective tool for improving the communication skills of postgraduate students of non-linguistic Universities. They contended that since the term "interactive learning is increasingly used in the field of information technology, distance education, use of Internet resources and work online", they consider the "main aspects of the computer development as a basic branch of knowledge, responsible for the development of interactive learning" (p. 120).

The flipped classroom approach, too, has become a buzzword recently; since the introduction of the term around 2011, there has been an exponential rise in its popularity as a Google search term. In a flipped classroom, the transmission of information based on lecture is replaced by out of class active, collaborative tasks done by learners. Through the use of computer technology and the Internet learners come to class prepared by watching a video-recorded lecture available online or on a social network. This way, the information-transmission component of a traditional lecture is removed from class time and replaced by some interactive e-based or computer-based activities designed to encourage active learning. The flipping of the learning can take different forms. In one form, the teacher asks students to watch a video lecture, or listen to a podcast to learn the key concepts of a particular lesson as part of their homework. Then, in the actual lesson, the instructor acts as a facilitator to help learners engage in problem solving activity types which require them to use the knowledge they had gathered through the completion of their homework (Milman, 2012 [1]). These problem-solving activities are usually done in groups of

[1] Milman Einstein "General theory of relativity". *Annalen der Physik*, 2012, vol. 49 (7), pp. 769–822, 1916.

learners (Sweet & Michaelsen, 2012[2]). Flipped classroom might also take the form of 'just-in-time teaching' to tailor instruction to student needs, mostly based on web-based questions posed before meeting in class (Berrett, 2012 [3]).

A literature review indicates some synonymous terms with flipped teaching which have been used in different studies (Hung, 2015 [13]). The term 'inverted classroom' is used by Lage and Platt (2000) [22], 'just-in-time teaching' is used by Novak (2011) [26], 'flipped classroom' is used by Bergmann and Sams (2012)[3] and 'inverted learning' is used by Barker, Quennerstedt & Annerstedt (2013) [2], Uzunboylu & Karagozlu (2015) [39] to refer to the same approach.

According to Bergmann, Overmyer & Wilie[4], a flipped classroom is replacing direct instruction with videos and encouraging students to focus on important learning activities with their teachers inside the classroom. Additionally, the flipped classroom allows the teacher to be a facilitator and also increase interaction and "personalized contact time" between teachers and students. The flipped classroom is also explained as creating problem-based learning inside the class and replacing direct instruction with videos in order to provide instructional content to be accessed whenever and wherever it is required by students (Bergmann & Sams, 2012; Hamdan, McKnight, McKnight, & Arfstrom, 2013[5]).

Since learners' learning styles are different from each other and personality type plays a significant role on deciding how a person learns best, therefore, it is natural that a teacher's teaching style and a learner's learning style are not compatible which may result in less learning or a lack of interest in the subject matter (Borg and Shapiro, 1996 [5]). A flipped learning approach lets students choose a strategy that works for them while moving at their own pace through the instruction.

A great deal of studies have also attempted to incorporate technology into the instruction and seek students' perceptions on this instructional change. In their study, Kalugina and Tarasevich (2018) [16].

Investigated smart technology integration into EFL teaching at a non-linguistic higher school. They reported some positive aspects mentioned by the students such as effective time management, instant feedback, completion of tasks in less time and relying on their own devices. There were some negative aspects, too, but the benefits outweighed the drawbacks. Their main aim was to develop problem-solving skills and analytical, critical and creative thinking in students. Their focus was mostly on the role of the teacher in the use of the technology. They concluded that the teacher was a facilitator and a consultant to the students and was moved away from the center of the teaching process. The results confirmed a more positive perception than negative towards this integration and an observable change in students' problem-solving and critical thinking skills.

In a study conducted by McLaughlin and Rhoney (2015) [25], they found that the teachers

[2] Sweet M., Michaelsen L. (Eds.). *Team-based Learning in the social sciences and humanities: Group work that works to generate critical thinking and engagement*. Sterling, VA: Stylus Publishing. 2012. ISBN-13: 978-1579226107

[3] Bergmann J., Sams A. Flip your classroom: Reach every student in every class every day. *International Society for Technology in Education*, Washington, DC: 2012. ISBN: 978-1-56484-315-9

[4] Bergmann J., Overmyer J., Wilie B. The Flipped Class: Myths vs. Reality. *THE DAILY RIFF – Be Smarter. About Education*, 2013. URL: http://www.thedailyriff.com/articles/the-flipped-class-conversation-689.php

[5] Hamdan N., McKnight P., McKnight K., Arfstrom K. Research, Reports & Studies / *Lit Review. Flippedlearning.org.* 2013. URL: http://www.flippedlearning.org/review

who used the flipped classroom approach developed higher awareness of teaching strategies. In addition, Kong (2014) [21] asserted that teachers who used the flipped approach improved their resources, experienced reflective discussions and shared their instructional practices. Hung (2015) [13] concluded that students' participation and satisfaction showed a positive change as a result of taking part in this pedagogical approach. Hamdan et al. (2013) [6] believed that the use of flipped learning model is one way of creating a learner-centred classroom environment. Butt (2014) [7] investigated students' perceptions of the use of class time by involving them in a flipped classroom structure. The results of the study indicated positive perceptions of learning experience, but no report was included regarding the success of the students in obtaining desired learning outcomes in all the courses they took.

One possible learning outcome obtained through flipped learning is critical reading development. Several researchers have highlighted the importance of improving critical reading skills of students of different ages (e.g., Jewett, 2007 [15]; Walz 2001 [41]; Zigo & Moore, 2004 [45]). To assist students to read critically, Jewett (2007) [15] used some strategies such as 'whose voice' and 'conversations with characters'. In the first strategy, students were asked to discover whose voices were heard in the stories, and what those voices said. In the second strategy, some students will take on the roles of the characters in the stories, while other students ask them questions. Walz (2001) [41] investigated the role of internet as a new context in developing critical reading skills in learners. According to Walz, internet is a good place to practice critical reading skills because "internet is available to all, is attractive enough to encourage frequent visits, yet has absolutely no accountability, since anyone can publish any information, right or wrong, on any topic, and not have to defend it" (pp. 1193–1194). He focused on three aspects of critical reading with regard to the internet: context, vocabulary, and content. Context provides basic background information; vocabulary will provide additional information essential to critical reading; and content provides the information the reader needs in order to find the flaws in logic found on the web such as manipulation, unsupported arguments, and bias.

Most of the studies on critical reading in EFL setting were focused on classroom instruction dealing with either students' critical reading activity or the teacher's technique in eliciting students' critical skills. Moreover, even though there is an increased contribution to the educational environment by research on the use of flipped classroom, very little research has been undertaken into flipped classroom approaches to show its effectiveness in developing students' critical reading. Further research is required to study the effect of a flipped learning environment on obtaining desirable learning outcomes pertaining critical thinking and reading. There is a need to shed light on design specifications of flipped classrooms as well as intensively investigating the use of technology and other useful teaching and assessment instruments. This study intends to contribute to the available literature in this regard. To this end the following research questions were investigated:

1. Does interactive e-based flipped learning help improve literature students' critical reading ability?
2. Does the interactive e-based flipped learning approach lead to better

[6] Hamdan N., McKnight P., McKnight K., Arfstrom K. Research, Reports & Studies / *Lit Review.* *Flippedlearning.org.* 2013. URL: http://www.flippedlearning.org/review

improvement of critical reading ability than the non-interactive approach?

What are students' perceptions of the flipped learning approach?

Materials and Methods

Research Design

For the purpose of the current study, mixed methods research (Creswell, 2014[7]; Kim et al., 2014 [19]) was used to investigate changes in students' critical reading ability as a result of using a flipped learning approach and their perception towards it. Thus, a quasi-experimental pre-test- post-test design was used to answer the first research question. For the second question, a qualitative design based on negotiated interview was used. According to Creswell (2014), qualitative and quantitative research methods have their advantages and disadvantages, which can be addressed by the use of mixed methods.

Participants

The participants of the study were 38 first-semester Iranian students studying English literature at the University of Mazandaran, Iran. Their ages ranged between 18–21 and they all shared the same mother tongue. A test of OPT indicated students proficiency level to be intermediate. Four students whose scores were far below or above the mean and skewed the results were removed from the pool of participants leaving 34 students. The four-credit course of reading comprehension met for 4 hours per week for 14 weeks; thus, this study conducted 14 weeks of activities. Their responses when they were required to criticize a text beyond the setting of the classroom instruction, in a form of independent e-based reading activity was explored. Students' responses were based on meaning negotiation and interaction through social networks.

Instruments

A critical reading test was selected from the SAT website based on students' proficiency level which was determined through an OPT test at the beginning of the study. This test was used to investigate the changes, if any, occurring in students' critical reading ability as a result of engaging in interactive e-based flipped learning model of learning.

Negotiated interview was used to explore students' perceptions toward this model of flipped learning. The interview included the following questions: (1) How do you feel about the flipped classroom activities done outside of the class? (2) What is your opinion about the e-based interaction with your classmates? What differences did you experience when you interacted with other students in a flipped classroom? How has this impacted your critical reading ability? (3) How do you evaluate the in-class flipped classroom collaborative learning? How has watching videos accompanying your readings influenced your learning? What do you like and dislike about learning this way? (4) What do you think about the post-class activities? In what ways, if any, does this model of flipped learning make you think deeper?

Procedures

Three dimensions were considered in the interactive e-based flipped learning model: content, processes, and flipped classroom activities. In terms of the content dimension, the course focused on developing reading skills and strategies as well as some critical reading skills. From among these areas, the development of critical reading constituted a particularly important aspect of the

[7] Creswell J. *Research design qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: SAGE Publications, 2014. ISBN: 978-1-4522-2609-5

course and was highlighted both in in-class and outside of class activities.

Regarding the dimension of interactive e-based processes, attempts were made to cultivate students' problem-solving, critical thinking, oral and written communication, and group work skills. Wen (2008) [42] proposed that the "Output-driven/Input-enabled" model, drives learners to pursue input, and input enables learners to produce output. According to Wen's model, teachers are responsible for: designing authentic output tasks that meet and improve the learner's proficiency level, providing appropriate task-based inputs to enhance learner intake, providing appropriate output assistance to improve learner ability, and offering targeted feedback rather than general suggestions (Wen, 2013) [42]. Wen's instructional model is well embodied in flipped learning and accordingly, the teacher helped the students to form groups of 4 to 5 students each. Each group was expected to have their own online interactions regarding the critical reading tasks specified each session and engage in critically analyzing and providing feedback to each other's' analyses .Before class students were asked to read the assigned text and watch the related clip and write a journal entry based on the them. Then they were asked to post their reflective journal entries (written work & audio recording) on Telegram; and finally provide verbal or written feedback on each other's' journals in small groups.

In terms of the flipped classroom activities dimension, this study incorporated various interactive, collaborative learning and learning-by-doing activities such as going through the reading text, group discussion, engaging in comprehension questions and critical thinking activities, and presentations. The activities were designed based on the principles of the flipped model of learning. In this study, flipped classroom activities were done in three stages of before-class learning preparation, in-class learning activities, and post-class learning consolidation (Kong, 2014, 2015 [20–21]). During in-class learning activities, collaborative learning was encouraged. After the teacher introduced the lesson through some brainstorming, various collaborative activities were designed according to the lesson, to help students enhance their skills through active participation. The post-class consolidation included students' reanalysis and review of their own and their groupmates' journal entries in the e-based group.

Results and Discussions

Results of research question 1: Does interactive e-based flipped learning help improve literature students' critical reading ability?

The difference in pre-reading and post reading of the interactive e-based group was tested with a paired samples t-test. The results turned out to be significant from pre-reading (M=11.76, SD=4.67) to post reading (M=13.76, SD=4.19) (t=2.76, df=16, P<0.05). The eta squared indicated 0.32 a large effect size.

Group Statistics

		N	Mean	Std. Deviation	Std. Error Mean
	Non-interactive	17	11.53	2.900	.749
	Interactive	17	13.63	2.553	.638

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
HE	Equal variances assumed	.552	.463	-2.135	29	.041	-2.092	.980	-4.095	-.088
	Equal variances not assumed			-2.126	27.958	.042	-2.092	.984	-4.107	-.076

An examination of the data indicated that there was no violation of the normality assumption. The result showed that there was a significant difference between the subjects in the non-interactive flipped group (M=11.53, SD=2.90) and the interactive e-based group (M=13.63, SD=2.55) (t=2.13, df= 29, P<0.05). Additionally, the magnitude of the difference in the means was large (eta squared=0.13) indicating that interactive e-based flipped learning has contributed to a better development of students' critical reading ability.

Results related to research question3: What are student's perceptions of the flipped learning approach?

All interview responses were recorded and transcribed. After coding all the transcribed data for the possible themes and subthemes, two general themes emerged each with their own subthemes.

1. Interactive e-based Flipped classroom features: Type of instruction, Type of interaction and collaboration, Type of learning
2. Critical reading features: Depth of reading activities, engagement in questioning, evaluating and analyzing

Almost all the students in the interactive e-based group made remarks about the different classroom instruction they experienced through this model of flipped classroom where they were given great opportunities for in depth analysis of their own and their groupmates' journal entries. Classroom discussions were reported to have helped students move away from asking surface-level questions to deep, critical thinking questions.

Some students perceived differences in the types of engagement with their peers in a collaborative manner. One of the students with low self-confidence asserted that at first I thought that flipped classroom meant you were just watching videos, but engagement in the interactive e-based group helped me realize it was more than that and even more than mere

discussion. Collaboration referred to factors that affected how they interacted in an academic manner through social media that was not considered as being academic. In other words, students' interactions took a different form where they learned to communicate their ideas through two channels of verbal and written language in a social network which previously was mostly used for non-educational purposes. The sense of collaboration was mentioned to be improved over time and most of the students believed they had learned a lot about what collaboration meant and how effective it could be in improving their learning and critical reading skills.

The type of learning that some of the learners expressed have happened in the course and was different from whatever they knew before was that they learned a lot by engaging in collaborative tasks and from each other rather than by relying solely on the teacher.

When asked about their perceptions of critical reading skills in this flipped learning approach, the following subthemes emerged: Depth of reading activities, engagement in questioning, evaluating and analyzing. The depth of reading subtheme referred to activities that enabled them to go beyond general surface learning of concepts. One of the students believed that their peers' intervention, interaction and feedback led them to think differently about certain concepts.

The subtheme of engagement in questioning, evaluating and analyzing referred to students having sufficient time to ask questions both in class and outside on the social network as well as have the time to think about what critical questions can be asked to analyze and evaluate a topic.

And finally a very small proportion of the responses have mentioned that this approach have helped them take more responsibilities for the own learning.

Discussion

Results of the first two research questions indicated that e-based interactive flipped learning approach was effective in improving students' critical reading skills. The findings of the study are consistent with previous research showing the effectiveness of flipped classroom (Chen & Chen, 2015 [8]; Estes et al., 2014[8], Baepler et al., 2014 [1]; Findlay-Thompson & Mombourquette, 2014 [10]).

Type of instruction and the type and amount of interactions were mentioned by students as being helpful, different and interesting. This is in line with scaffolding in sociocultural learning theory in that students' interactions become more meaningful to them which was achieved through the sharing of information through available videos first and then through social networks (Sweller et al., 2011)[9]. Students' descriptions of different types of learning in which they engaged had led to achieving deeper learning by them in the flipped classroom which could be related to schema theory since students were able to make more meaningful connections to the course content (Anderson, 2004) [10] . Sociocultural

[8] Estes M. D., Ingram R., Liu J. C. *A review of flipped classroom research, practice, and technologies.* 2014. URL: https://www.hetl.org/feature-articles/a-reviewof-flipped-classroom-research-practice-and-technologies/

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[10] Anderson L., Krathwohl D., Airasian P., Cruikshank K., Mayer R., Pintrich P., Wittrock M. Taxonomy for Learning. *Teaching and Assessing: a Revision of Bloom's Taxonomy*. Longman Publishing, New York, 2001. ISBN 0-321-08405-5

learning theory (Vygotsky, 1978) [11] promotes increased access to meaningful information and activities that promote connecting with others and with content as presented in schema theory (Anderson, 2004), Just like Ziegelmeier and Topaz (2015) [44] who found that the flipped group had more time to ask, the results of this study also illustrated more meaningful learning which was the result of having more time available to understand the content. Similar to the present study, Clarik (2015) [9] and Green (2015) [12] both found that students treasured individualized class time because it increased their opportunities to ask questions and address their challenges and problems.

The findings of this study are consistent with research by Strayer (2012) [36] highlighting increased student autonomy in the learning process among students. The findings also are consistent with research by Prober and Heath (2012) [32] stating the increase in learner curiosity and questioning and reasoning in the flipped classroom approach with medical graduate students.

Moreover, the results are consistent with Vasbieva et al. (2018) [40] who investigated teachers' role in a smart classroom. The findings of their study indicated that the use of technology provides effective tools for teachers to personalize their teaching, adjust teaching and assessment, and create authentic learning environments for students. Additionally, just like the present study, they also concluded that using technology brings "real life experiences into the classroom and engages students, and prepares them for life-long education and future careers in a way that traditional practices often fail to do" (p. 271).

The collaborative nature of flipped learning also led students to develop a greater self-awareness of their own learning strengths and weaknesses as well as growing awareness of support for learning among peers. Khan (2009) [18] and Chandra and Fisher (2009) [7] asserted that students liked technology resources due to the prevalence, accessibility, and convenience of resources, and its replaying feature and this led them be more actively participating in classroom activities. Kay and Knaack (2008) [17] stated that students were comfortable using videos for learning because they were used to learning that way, which was also proved right for the technology savvy youngsters of this study. Consistent with Love et al. (2013) [23] and Sahin et al. (2014) [33], Sendag et al. [34], this study also showed that participants found videos as helpful in improving level of understanding and self-efficacy with the content. Finally, Clark (2015) [9] found that students' desire to learn improved with the flipped classroom which motivated students to look for more useful resources. Thus, this study supported studies related to the helpfulness of technology in learning. Students reported their eagerness towards the use of social media for academic applications. This is contradictory, however, to Hutchings and Quinney's (2015) [14] research study in which even though there were some academic gains, yet the student-centered learning environment and use of technology was challenging for students. Results of this study were not consistent with Fulton (2012) [11] research that concluded that students in his study were provided with resources to use outside the classroom, but they did not use them effectively. Students in the present study reported that initially they had difficulty using the online resources, but once they got used to the approach, their learning was enhanced. The positive attitude of students in

[11] Vygotsky L. S. *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press, 1978. ISBN: 0-674-57628-4

this study pertaining technology use and collaborative learning were rewarding and therefore call for more detailed attention in future studies. For example, the topic of literature is significant in relation to the ideas and life of Soren Kierkegaard. (Pavlikova, 2018 [30]; Binetti & Pavlikova, 2019 [6; 31]; Martin et. al. 2018 [24]; Pavlikova 2017 [29]; Omarova et. al. 2018 [28]; Tavilla et. al, 2019 [38–39]).

Conclusions

The growth of flipped classroom may offer some distinct benefits for EFL language instruction. The distinctive features of this approach which have made it appealing to educators in different instructional settings are as follows: efficient use of class time by different learners, engaging in problem-solving activities, increasing student-teacher interaction, and helping students to take responsibility for their own learning so that they become lifelong learners. These features help learners to engage in critical thinking and problem solving skills.

The review of the literature indicates that the use of flipped classroom has made a great contribution to the educational environment. It has also been found that all levels of Bloom's Taxonomy can be accomplished by the use of the flipped approach. In the e-based interactive flipped classroom students were motivated to learn independently and out class time and also to interact with other learners and the teacher to enhance their learning.

Since it is difficult to meet every different learning style of students in the traditional classroom, the flipped classroom approach provides opportunities to accommodate students' various styles of learning. The flipped classroom, therefore, allows the inclusion of videos that can be accessed easily by learners (Bergmann & Sams, 2012[12]; Hamdan et al., 2013[13]).

Even though research had shown that student attitude toward flipped classroom approach was generally positive, some studies concluded that still there were students who preferred traditional teaching approach because of their lack of ability to ask questions during video lectures and their habits of being taught through the traditional instruction (Schultz et al., 2014 [35]). Since findings regarding student attitude toward flipped classroom approach are mixed, therefore further research is required to find ways of improving this instructional approach.

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