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A Remedy to the Misery of Language Learning Efficacy: Flipped Classroom*

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Abstract

Choosing the right method for teaching is an important step in learning. Corporate trainers have always been interested in finding new ways to achieve effective learning. The present study seeks to improve language learning by measuring, comparing and prioritizing the effectiveness of three methods: traditional, blended and flipped method. In terms of purpose and nature, the present study was experimental and with respect to method it was quasi-experimental including a pre-test and a post-test designed with an equivalent control group. The participants consisted of 66 employees in an Iranian organization who were required to attend English language courses. The participants were sampled in accordance with training needs analysis results in the organization. Moreover, data were analyzed by means of descriptive and inferential statistics including mean analysis, standard deviation, F-way ANOVA, and Scheffe post hoc test using SPSS software version 25. The findings of the study indicate a significant difference between the three groups and the ranking of methods in terms of learning effectiveness from the highest to the lowest level includes; 1)Flipped 2) Blended 3) Traditional, respectively. The results showed that in spite of the high effectiveness of the flipped classroom to the other methods, some cultural differences such as family preference, feasts, training customs and also resistance to new methods of learning hindered the allocation of sufficient time for practicing the lesson at home. In addition, such hindrances partially trace back to ancient Iranian culture. In conclusion, some suggestions were proposed to modify technology acceptance and other related weaknesses.

Key Words: Flipped, Blended, Effectiveness, Learning.

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Introduction

In the 21st century, bilingualism and multilingualism are one of the most complex and multidimensional phenomena in linguistics, psychology and society (Tollefson & Pérez-Milans, 2018). Over the past few centuries, second language acquisition has been considered important, and many efforts have been made to establish a second language education from an early age through educational systems as well as adults using informal practices. These efforts were initially limited to teaching English as a Second Language [1](EFL / ESL) and subsequently other languages [2](LOTE) were also taught (American Council on the Teaching of Foreign Languages, 2018). Second language learning improves brain function, strengthens memory, acquaintance with different cultures and nations, facilitates learning more languages, enhances creativity, improve self-confidence, paves the way for other jobs acquisition, enhances current jobs, and builds business relationships with other countries (Rahim, 2018). Therefore, it is necessary to employ the most effective teaching methods to get benefit from the numerous outcomes of second language learning. Hearing the need to provide education at any age, level and subject, traditional education is the simplest way to reach the human mind. Since traditional classes are face-to-face and lecture-based, so they allocate little time for inclusive participation, the use of technologies can give the teacher and learner more time outside of the classroom. This approach is appropriate for implementing active teaching methods and teaching complex concepts (Garrison & Vaughan, 2008). A prominent feature of this approach is the integration of face-to-face and online education that is designed and planned in a variety of models and ways (Fernandes et al., 2016). The present study aims to evaluate and compare the effectiveness of three traditional, blended and filliped methods in English language teaching. The following is a description of the methods.

Filliped Method

Filliped Teaching-Learning activities is a new approach to inclusive pedagogy (Gilboy et al., 2015). Explaining that inclusive learning is behind the concept of constructivism-based Filliped that emphasizes learning, knowledge building, and the transfer of responsibility for learning to the learner (Slavin & Davis, 2006). The founders of

inclusive learning are Dewey, Piaget, Bruner, Vygotsky, and Azubel. Foot & Howse (1998) propose peer learning, which is a combination of constructivism and participatory learning in Piaget's theory of cognitive development and cooperative learning of Vygotsky's the zone of proximal development. In participant-centered learning, learning styles such as David Kolb's empirical learning theory are a unique part of it (Verleger, 2009). The Filliped method is a pedagogical strategy that was first used in higher education and then in high schools and first secondary schools (Tucker, 2012). The evolution of this teaching approach was developed by Novak & Patterson in 1998 by combining a collaborative classroom with online teaching content and educators' efforts to understand inclusive needs, provide timely feedback, and design lesson to meet their needs (Estes, 2014). The filliped classroom pattern has been provided in various ways, the original and preferred form being presented by two chemistry teachers, Jonathan Bergmann & Aron Sams, in 2008 (Joanne & Lateef, 2014). The instructors recorded the class due to problems in teaching the absenteeism and acknowledged that the videos were also used by learners in the classroom to improve the learning process (Findlay-Thompson & Mombourquette, 2014). In the Filliped classroom, lectures are recorded and delivered to learners so that students can study and practice in their personal and home environments, since the main purpose of the classroom is to focus on applying and practicing the acquired knowledge (Pluta et al., 2013). In the case of filliped learning, the content is provided by the teacher and given to the learner, so the responsibility for learning transfer to the learners. (Pierce & Fox, 2012). This method reduces the number of learners and subsequently reduces educational costs. The rationale behind the classroom approach is to increase content engagement, teacher-to-student interaction, and to enhance learning (Rotellar & Cain, 2016; Chen Hsieh et al., 2017). The purpose of this approach is to focus on applying the knowledge gained in the classroom by creating a discussion between the teacher and the learners, which is done by acquiring basic concepts by the learners prior to the classroom (McLean et al., 2016). In other words, the filliped class operates in two phases: first, information transfer phase and second, its absorption and internalization (Jiang, 2020; Liu & Zhao, 2019). He et al. (2016) define the goal of this approach as eliminating lectures, and

define the Filliped classroom in three parts: 1- Compulsory pre-classroom learning 2- Deep learning, practice, and application in the classroom with new ways 3. Provide educational content that the presence of learners in the classroom is mandatory for learning. Many external studies have examined the impact of the Filliped on academic achievement (Olelewe & Agomuo, 2016; Gabrielle, 2003; Melton et al., 2009; Woltering et al., 2009; Wieling & Hofman, 2010; Mendez & Gonzalez, 2011 & 2013; Deperlioglu & Kose, 2013). But it should be noted that combining online and traditional education alone will not guarantee quality of learning (Choy & Quek, 2016). Numerous studies have investigated the impact of this method on learning all or one of the English language skills, especially writing skills, in different quantitative and qualitative ways across countries around the world. The results of the research indicate the effect of the Filliped classroom on the better performance of learners in learning English (Soleimani et al., 2019; Lin et al., 2018; Shih & Huang, 2019; Wu et al., 2019 and Webb et al., 2014). Research results has shown that Filliped classroom is more effective than traditional method (Nishigaw et al., 2016).

Findings has shown that learners' verbal skills improved in filliped method and learners had a positive attitude toward this learning style (Hsieh et al., 2016; Li & Huang, 2017) and improve learners performance (Patanwala et al., 2017; Hao, 2016; Njie-Carr et al., 2016; Şengel, 2016). The Filliped class has a positive effect on self-efficacy beliefs and intrinsic motivation (Thai et al., 2017). Filliped classroom can enhance self-directed skills in learners (Piri et al., 1977). In reviewing references, there is indirect evidence of the importance of the Filliped learning approach including learner’s satisfaction and classroom scores (Mason et al., 2013; Wilson, 2014). The results of many studies indicate that learners tend to watch lecture films rather than enhancing classroom interactions (Lage & Platt, 2000; Bland, 2006; Gannod, 2008; Zappe et al., 2009; Day & Foley, 2006; Stelzer et al., 2010; Thomas & Philpot, 2012; Moravec et al., 2010).

Blended Learning

Traditional teaching is not responsive to learners' needs, and e-learning is also criticized for Absence of learners in one place. The blended learning method utilizes both approaches and provides a good opportunity for training. Blended learning is called the third generation

of distance education. The first generation included one-way training tools for correspondence training including radio, television, and email. The second generation is purely technologies such as web-based and computer-based learning and the third generation is blended learning using traditional education and new technologies (Akyüz & Samsa, 2009). Many definitions are provided for the Blended learning. For example, Garrison & Vaughan (2008) it has defined the thoughtful integration of e-learning and face-to-face learning. Rossett & Frazee (2006) know the conflicting approaches in learning such as formal and informal learning, online, face-to-face, and guided, self-command, and using digital resources. Procter (2003) in a more comprehensive look, this type of training includes the effective combination of different presentation methods, teaching models and learning styles. However, the most comprehensive definition in this field provided by Driscoll (2010) in 4 dimensions including: first the combination of Web-based technology methods for achieving educational goals, second combining a variety of pedagogical approaches to optimally produce learning outcomes with or without educational technology, Third the combination of educational technology with face-to-face training and finally the combination of educational technology with real job duties are presented to create a harmonious impact between learning and work. The benefits of a blended learning method include flexibility, convenience, the ability to connect to the Internet and chat. (Björk et al., 2008) The disadvantages include lack of social interaction, lack of dialogue skills, time management skills, and the possibility of cheating in evaluations and tests(Al-Qahtani & Higgins, 2013) Therefore, with the right combination it is possible to take advantage of the benefits of both methods as well as control and reduce the disadvantages of the route. There are a variety of models for blended learning that include face-to- face driven model, online driven model, rotation model, Filliped classroom, flex model, and online lab. Also Educators and planners in accordance with organization's policies, facilities and equipment, educational goals, and subjects planning choose suitable plan and take action. (Bryan & Volchenkova, 2016). In spite of positive awareness and attitude of faculty members towards blended learning (Zolfaghari et al., 2009; Rakhafrooz et al., 2013) and the positive attitude of students (Ajam et al., 2013) this approach has been less

common in Iran. Research findings on undergraduate nursing students indicate a significant impact of the Blended method on learning (Zolfaghari et al., 2010; Soltanian et al., 2015). Also, the results of comparing the three methods of face-to-face, online and blended learning on students (Abdollahzadeh, 2013) and industry staff (Salari & Karami, 2014) indicate the effect of blended method. Thai et al. (2015) showed that among the 4 methods of face-to-face, non-face, Filliped and face-to-face combinations, the Filliped blended model had the greatest impact on academic performance. Despite numerous studies on the effect of the Filliped method learning, some authors have rejected this effect (Tseng & Walsh, 2016; Szeto, 2014).

Necessity of research

Unlike inside Iran, there has been a great deal of research in the world on the effectiveness and impact of using a learning management system on teaching-learning processes because the use of this technology for face-to- face driven model has not yet found its place in Iran (Zarebidaki et al., 2013)

Managers are always worried about the heavy costs of training programs and tend to see the results of investments in this process. The results of educational programs occur through changes in behavior and learning rates. According to this, corporate trainers have always been interested in finding new ways to achieve effective learning and respond to the mangers concern. As explained, English is one of the fundamental tools for communicating with international organizations and accessing world-renowned scientific databases that staff need for this vital tool to keep themselves updated. Despite assessing the effectiveness of teaching methods in non-Iranian organizations, the purpose of this study is to evaluate, compare and rank educational method including Filliped, blended and traditional within Iranian organization in order to improve the learning of English as a vital communication tool.

Research questions:

1. Which method of learning included traditional, blended and Filliped have the most impact on learning and job performance in English language learning?

2. Why are modern teaching methods such as the Filliped in Iran feeble?

Research method

In terms of purpose and nature, the present study was experimental and with respect to method it was quasi-experimental including a pre-test and a post-test designed with an equivalent control group. The participants consisted of 66 employees in an Iranian organization who were required to attend English language courses. The participants were sampled in accordance with training needs analysis results in the organization. Employees were randomly divided into three groups of 22 people each, the first group being trained in the traditional method (G1), the second group in the Blended method (G2) and the third group in the Filliped classroom (G3). Oxford English Placement Test (version 2) was used for design pre-test to assess the level of English language learners in all three groups, the results showed that there was no significant difference between the three groups. In addition, post-test was designed and implemented in 40 questions including 12 questions about vocabulary, 13 questions on grammar and 15 questions comprehension as a blank (9 items), correct/False (6 items) and multiple choice (25 items). Pre-test and post-test validity was approved by 5 English language teaching specialist. Also, "Top Notch" and "Writing in Paragraphs "were books as a base for teaching 4 skills (Reading, Listening, Writing, and speaking) selected by one instructor for all three groups (Master of Art in field English Language, graduated from Isfahan University) and taught for a semester. Content for third group (G3) was presented through the WhatsApp application. Teacher composed a group for downloading and uploading content (video, photos, audio, text, etc.), then added G3 learners as member. The content should be uploaded one week before the class and learners committed to study the content. Also, G2 members used Learning Management System (LMS) as complementary of traditional class. Content and homework uploaded on LMS and asked from learners to do it and reply through the LMS and a community was created to strengthen the group discussions to answer questions and solve learner's problems. In contrast, G1 training was conducted by teacher lectures. In this method used smart-board and power-point and asked learners to do homework and provide them in print or PowerPoint. Due

to time constraints, there was also brief group discussion at the end of the class. The three group learners' attitude assessed by Learning experience questionnaire (LEQ) at the end of course. The questionnaire consisted of components including learning experience, effect on hearing, speaking, writing, reading abilities and content involvement. Reliability and validity of questionnaire approved by 5 specialist. Moreover, for deep review 4 open-question asked from learners at the end of sheet. Data were analyzed by descriptive and inferential statistics including mean analysis, standard deviation, F-way ANOVA, and Scheffe post hoc test using SPSS software version 25.

Findings

Participants were 66 employees of an Iranian organization including 38 women and 29 men between the ages of 30 and 45 years (M = 39.07, SD = 1.95). They have studied English for 6 years in colleges, high schools or language institutes. One of the aims of this study was to evaluate the learners 'satisfaction. The results were obtained using the learners' reaction questionnaire. The results of one-way ANOVA showed that there was a significant difference between the groups, and the results of the Tukey post hoc test showed that learners are more satisfied with Filliped classroom compared to other methods.

P	**F**	**standard deviation**	**Mean**	**Groups**
.000	71.469	1.49	51.38	**Traditional**
		1.575	58.40	**Blended**
		1.927	73.26	**Filliped**

Also, the results of the open- questions indicated that the G2 and G3 learners found the training enjoyable, active, and participatory. However, the two group's learners mentioned need for more time to study, the high volume of content compared to traditional classes, the difficulty of studying at home, the high volume of work, and they preference to spend time with their families at home. They pointed out that active learners with better knowledge could take benefit from these methods. It also requires creative, supportive and active teachers as a mentors.

The present study seeks to improve language learning by measuring, comparing and prioritizing the effectiveness of three methods: traditional, blended and flipped method. The results of one-way ANOVA showed that there was a significant difference between the groups that used Filliped class to the others. That is, the scores of learners who were trained in Filliped were higher than the other two groups.

P	**F**	**standard deviation**	**Mean**	**Groups**
.000	29.920	1.671	41.78	**Traditional**
		1.830	42.61	**Blended**
		1.793	46.59	**Filliped**

The purpose of this study was to evaluate the change in learners' behavior after attending a training course, which was measured with appropriate interval and utilizing 5 key performance indicators. These indicators were five writing's errors that observed in the pre-test which included: 1. Subject verb agreement 2.tense 3.puntuaation 4.cohesion 5.coherence.Performance indicators based on teacher's opinion, direct supervisor and educational planning team for utilizing behavioral level were determined and evaluated by learner, instructor and direct supervisor with weights of 25, 25, 50 respectively at six months later. The results showed that the errors in writing decreased 38% in Filliped (G3), 22% in Blended (G2), and 17% in Traditional (G1) groups.

Conclusion

Flipped classroom is primarily a learner-centered activity that is adopted rather than teacher- centered lecture. Flipped method has emerged as a promising alternative to traditional teacher-centered method by proposing a network which combines online learning technologies with participatory and active learning. In this way, the content and training material are presented before the class and activities during the classroom focus on advanced issues, concepts and participatory learning. This model provides opportunity for learners to engage with learning materials, time and speed in accordance with the individual capabilities. Likewise, the method focuses on transferring content from teachers to learners. Therefore, active learning and problem solving will be improved. Of course, the definition of Flipped

classroom is more than just delivering the content in the classroom and observing how thinking about learning develops (Little, 2015; Fautch, 2015; Galway et al., 2015). Flipped Classroom is not an incompetent substitute for teachers and online courses, but rather it aims to create more collaboration among learners. Moreover, full attention to the topics avoids misunderstanding in flipped classrooms (Şengel, 2016). Flipped learning is a way to enhance face-to-face interactions and effective conversations. It should be noted, preparation for flipped classroom is not easy and considering the changing role of the teacher and the learner is also essential to influencing learning. Kaviani et al. (1977) noted that the flipped method requires a change in classroom structure that provides different roles and responsibilities for the instructors and learners, and it is summarized in two parts: inside and outside of the classroom activities. Also, this learning style is influenced by causal factors (external and internal motivations), learning process strategies used by the learners (participatory, exploratory, independent and in-depth), context (time management, teaching materials, and lesson plan) and intervening conditions (factors, individual, educational, organizational, cultural). Causal factors include internal and external factors. Firstly, internal factors include individual differences, maintaining attention, time flexibility, independent learning. Secondly, external factors include group learning, interactions, and receiving feedback (Kaviani et al., 1986, b). Flipped method's strong emphasis on learners raises some questions about classroom time management and facilitation of learning. These problems are tackled by the principal components of flipped method implemented within the classroom including learner-centered teaching and interaction, and outside of the classroom including teacher-centered learning and direct education. As a result, flipped takes time and even solve such problems by delivering lectures outside the classroom and underscoring deepening learners' comprehension. Inclusive learning activities include active learning, peer-assisted learning, cooperative learning, problem-based learning, and collaborative learning, which is consistent with theoretical evidence of flipped classroom (Kaviani et al., 2018 a). In summary, the results of the study showed the effectiveness of flipped classroom on the levels of reaction, learning and behavior, as compared with other methods. The traditional and

blended methods were ranked second and third, respectively. The results of the study are in line with the results of Alsowat (2016), Chi-Jen Lin & Gwo-Jen Hwang (2018), Amiryousefi (2019), Wu et al. (2019), Mohammadi et al. (2019), and Su Ping et al. (2019). The strengths of the flipped classroom were creating opportunities to control intervening factors such as differences in learners' learning speed, self-confidence, taking responsibility by devoting more time to practice upon content at home then internalizing the content in the classroom for deep understanding. Although the effectiveness of a flipped class was of primary interest, it should be noted that there was no significant difference among married learners with children at extent of learning. Married interviewees stated that some issues such as shortage of time at home and preferring to spend time with family members, feasts and customs on training were among the most important barriers to practicing the lessons at home, such obstacles partially stem from ancient Iranian culture. Accordingly, these people had more tendency towards the traditional method. To minimize these weaknesses, it is suggested that designing and planning a flipped class proves to be more advantageous to single or unmarried learners. In addition, holding work-life balance and ambidextrous courses may develop competence for learners to manage incompatible goals. A number of learners in the interview stated that they were not sufficiently familiar with the technologies used; for this reason, they were experiencing several difficulties at the beginning of the course. Therefore, in order to ease the technology acceptance, it is suggested that the use of electronic technologies, including pedagogical tools and teaching equipment, be held before the flipped classroom for learners to enhance participation and to damp resistance to the change (Davis, 1989). If possible, simple and practical tools should be selected. In addition, an action plan for organizational culture should be prepared. Developing technological infrastructures is as important as developing learners' understanding. The problem of low speed Internet and network disruption has been raised by some learners in online communication which can be solved by providing a high volume of educational content offline. According to the lecturer and learners, the formation of a triangle of training staff, learner and teacher, with the role of tutor and instructor (Jiang, 2020), and continuous feedback will play a constructive role in ensuring class

performance, identifying and resolving potential problems. In this path, the instructors play a very important role in successful implementation of the flipped. Consequently, the adoption and development of this method is essential for this group.

Notes

1. English as a Foreign Language / English as a Second Language

2. Language Other Than English

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