

Exploring the Role of M-Game as a Seat of ESP Reading in the Iranian TVT

Mohammad Javad Mohammadi

PhD Candidate, Allameh Tabataba'i University
m.mohammadi1377@gmail.com

Saeed Khazaie

PhD, Shahid Chamran University of Ahvaz
saeed.khazaie@gmail.com

Mohammad Khatib

Associate Professor, Allameh Tabataba'i University
mkhatib27@yahoo.com

Abstract

To direct m-game to be a possible didactic option for Iranian TVT (Technical Vocational Training) trainees, in this study m-game-mediated (Mobile Game-Mediated) materials delivery was incorporated into the conventional teaching method in the blended ESP reading skill platform. So, 52 male trainees from *Technical and Vocational College of Isfahan* were selected by convenience sampling. Afterwards, 48 trainees were defined as homogeneous using *Englishtag Test* to learn ESP in 16 triads under two different blended learning scenarios in 18 sessions in the academic year 2014-2015. While the first group of the trainees practiced in the blended learning situation with ready-made displaying device and materials, the second-group trainees practiced the same content through the medium of their own self-made PDA (Personal Digital Assistant) and materials; in this way, their learning performance assessed continuously in and outside the classroom. To employ tree-prong approach, interest survey and focus-group interview were embraced, as well. Overall, descriptive and inferential analyses of the collected data disclosed that trainees who were involved in the process of materials development were more excited and learned more than their counterparts who practiced via prefabricated devices and materials. Consequently, self-made (vs. prefabricated) m-game-mediated blended platform was found to be more liable to teaching and learning ESP reading skill.

Keywords: Blended Learning, ESP, ICT-mediated Learning, Iranian TVT, M-game.

Received: January 2015; Accepted: October 2015

1. Introduction

Though conventional teacher-led classroom has been the prime medium through which materials are taught, at present, this learning context is undergoing big changes. In fact, independent and rapid learning is no longer going into teacher-led classroom where teachers teach lessons and ask students questions whether they learned the contents or not. A number of studies (e.g., Ally, 2009; Çelik, 2015; Khazaie & Ketabi, 2010; Zarei & Gilanian, 2013; among others) have found that being able to practice the content in this conventional arena is a far cry from being able to use them coherently in connected streams of learning for the reason that a main flow of teaching in the conventional method is the tendency to teach content isolated from eloquent context. So, these days one of the great concerns expressed by the educational authorities around the world is finding paths to make the climate for second language (L2) students more dependable and supportive. To be exact, authorities' concern is greatly outpacing the rate at which the current educational system trains L2 students. One noteworthy trend in this respect is the Technical and Vocational Training (TVT) authorities' attempt to address the contemporary academic needs of the trainees through devising new ways for teaching English for Academic Purposes (ESP) reading skill.

ESP reading skill is widely acknowledged and encouraged by technical disciplines, in which content-based mastery is heavily put emphasis on (Anderson, 2003). In effect, by bridging the gap between trainees' general English knowledge and their comprehension of the reading filed-specialized passages practitioners intend to paves the way for trainees to aim high, which, in turn, facilitates trainees' access to their specialist subject knowledge (Widdowson, 1990). However, according to McDonough and Shaw (2005) reading in Iran's TVT seems to be different owing to the fact that this is the

Exploring the Role of M-Game as a Seat of ESP Reading...

case “where the trainees have to read English for their own specialist subject but may never have to speak the language, namely English as a library language” (p. 89). To properly appreciate ESP reading skill in such situation, Nation (2003) believes “vocabulary must not only be known, it must be readily available for use” (as cited in Nunan, 2003, p. 134). Thus, creating optimum conditions for effective teaching L2 English vocabulary along with reading seems indispensable, as well.

To those ends, for the moment, many educational authorities are embracing Information and Communication- (ICT)-based L2 pedagogy to induct into their profession new avenues of teaching and learning as well as to reduce the frustrations and increase the rewards of teaching. More to the point, with the advent of new wireless mobile applications (apps), there is a renewed interest in the effect ICT has on learning to the effects that they are vying to carve a niche for themselves in the arena of L2 teaching and learning. Along these lines, researchers (e.g., Barely, 2014; Bhaskar K, 2013; Carvalho, 2014) note that the teachers who keep themselves up to date in their profession through diverse routes are better able to match themselves with the contemporary instructional needs. Being imbued with recent technical properties, TWT is considered a rich arena to move in the same direction with for ICT-mediated L2 teaching and learning.

On the other hand, as far as employing ICT for teaching and learning is concerned reviewing the researches indicates that the results of studies are full of loopholes. And thus, using ICT-based teaching remained a very unfashionable medium among teachers and administrators wedded to the conventional methods of teaching. Within this period of uncertainty, nevertheless several studies led to the conclusion that it is becoming increasingly difficult to address the needs of the present-day educational

societies by using a single didactic source. Results of these studies revealed that reliance on one method (i.e., either conventional or ICT-based) is hard to pin down and futile.

Blended learning method is not an all or nothing learning situation where either the conventional method or the ICT-based method is employed. It is somewhere in between, where students through balanced range of learning opportunities practice and learn content materials in classroom- and nonclassroom-situations. Because of this, blended learning platform clears the way for recycling the focus of instruction with providing new context for practicing the contents. In this fashion, blended method of learning is considered a way of getting students more involved in their own L2 learning process. Horn (2015) asserts that “blended learning frees up time for project-based learning, higher-order thinking teaching and learning, and Socratic discussions” (p. 1). On the words of Renwick (2015) “administrators saw blended learning as a way to provide more personalized, self-directed learning that they could focus on the high-level cognitive skills that students need to succeed in college and beyond” (p. 1). In these blended platforms, instructor is “[a] language coach [who] supplies information; gives model from time to time; sets high standards; provide a wide variety of practice opportunities; and supports and encourages learners” as Morley (1994) states (p. 89). Accordingly, it seems possible for the ICT to continue living in the mint condition of blended learning platform where the spirit of reconciliation with the conventional methods of teaching has been revived.

Gaming and simulation, in the virtual world, are ranked among the popular ICT-based task types in the contemporary L2 learning classroom as Nunan (2003) claims. Mashhadi and Khazaie (2015) note that, games have exerted a great deal of influence on teaching to the point that they came to be known as

Exploring the Role of M-Game as a Seat of ESP Reading...

the didactic media. Likewise, many researchers (e.g., Ashraf, Ghanei Motlagh, & Salami, 2014; Vahdat & Rasti Behbahani, 2013) think mobile game (m-game) has added something important to language teaching and learning; that is to say, ubiquitous instructional podium. Indeed, m-game-mediated learning is an added value of mobile wireless technology. In spite of the profusion of research findings on the advantages of games for knowledge construction, empirical data on how they were embraced by L2 teachers and students seem scarce.

Because the TVT trainees need to do academic study, namely ESP reading skill, in their higher education, the focus of this study was m-game-mediated blended vocabulary and reading comprehension learning; so, one of the study's goal was to increase the amount that trainees are reading L2 academic passages. As it happens, this study looked at whether or not m-game-mediated blended learning platform helps Iranian TVT trainees with learning ESP reading skill and, if yes, when this app assists the trainees to come up with better result. This way, the purpose of m-game-mediated practices was to demonstrate the trainees' knowledge of new vocabulary and their ability for tapping into this knowledge for grasping the meaning of the ESP passages which are comprised of these new vocabulary items; that is, tailor-made passages.

2. Research Questions

Using triangulation, this experimental study intended to come to realize whether the m-game-mediated blended platform can be a channel for improving the ESP reading skill in Iran's TVT Organization; thus, the research questions that can be proposed are as follows:

1. What effect (if any) does trainees' perception of m-game-mediated blended platform have on their ESP reading skill?
2. To what extent does the m-game-mediated blended platform lend itself to teaching ESP reading skill to Iranian TVT trainees?
3. Which properties of the m-game-mediated blended platform could be useful for learning ESP reading skill from the participants' perspective?

3. Method

This section illustrates how the study was set up to tackle the research questions.

3.1. Participants

In the fall semester of the academic year 2014-2015, 52 male sophomores from departments of Computer (n=22) and Electronics (n=30) at *the Technical and Vocational College of Isfahan* were selected through convenience sampling method. They enrolled for *English for Students of Engineering* as an obligatory ESP reading course. All the selected trainees had already studied English as a mandatory subject in their Junior High School and High School. In order to justify the homogeneity, the selected trainees were given *Englishtag* (2008) proficiency test. After assessing the selected trainees' performance on the *Englishtag*, four trainees with scores more than the mean score were identified as heterogeneous and 48 trainees whose scores fell below the mean were elected as the participants.

Table 1. Descriptive Statistics of Englishtag

<i>n</i>	52
Mean	47.64
SD	8.18

Exploring the Role of M-Game as a Seat of ESP Reading...

Note. SD = Standard deviation.

Then, through nonrandom sampling method the selected participants were divided into 16 triads to complete the classroom and extramural exercises with their fellow trainees; so, the manner of practicing was shifted to interactive fulfilling of didactic activities. The justification for practicing in small groups, namely triads, here in this study, was to involve trainees in using L2 content materials as quickly and communicatively as possible (Allwright, 1984; Baker, 1994).

The distribution of disciplines in the triads was equal; that is, in each triad there was at least one member from Computer. At last, the triads were randomly assigned to two different scenarios to practice the content materials in the course. The scenarios are as follows:

First scenario: The members of eight triads in this scenario collectively practiced and learned the prefabricated virtual materials (the first-group trainees);

Second scenario: In this scenario, the members had made the virtual materials and delivery medium, namely Personal Digital Assistant (PDA), to practice and learn in the extramural situations with their own self-made products (the second-group trainees).

3.2. Instrumentation

Interest Survey: To answer the first research question which probed the participants' attitudes towards employing m-game-mediated blended platform for ESP reading, a Persian survey questionnaire was made. Fifteen 5-point Likert items were pigeonholed into three categories of the trainees' attitude towards using m-game (n=6), blended learning (n=4) as well as agreeing with active and collaborative role of trainees in teaching and learning processes

(n=5). The internal consistency of the questionnaire was computed through Cronbach's alpha and it was $r = .85$. Five TEFL experts internally authenticated and examined the selected items and its relevance to the research literature, namely face and content validity.

Also, to learn about what the trainees already know about technical aspects of PDA (hardware) and materials (software) two more general and open-ended question items were added to be asked from the second-group trainees.

I. What types of circuits can be used in making a PDA?

II. How to prepare multimodal materials to be displayed via PDA?

Focus-group Interview: Finally, to answer the third research question regarding the participants' views on different scenarios of learning ESP reading skill, four participants from each group were selected through nonrandom sampling method and invited via text messaging to participate in an interview session. This face-to-face bimodal interview was arranged to be conducted in the virtual world through *WhatsApp social networking* by the researcher in Persian. Below are the interview prompts in English:

1. How well is the m-game-mediated blended learning platform working for reading?
2. Was the platform effective? What benefit(s) (if any) do you think this platform has?
3. What item is missing or defect?

3.3. Materials

Lessons: Eighteen lessons were designed to be compatible with the trainees' needs; that is, to be sensitive to the trainees' academic need. Textbook exercises were identified as an instrument for assessing the participants' ability inside the classroom; that being so, the inside-the-classroom examination was

Exploring the Role of M-Game as a Seat of ESP Reading...

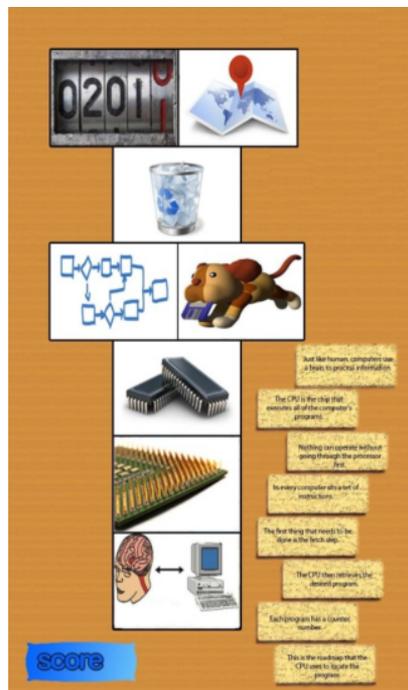
by continuous assessment. Because each lesson was to have m-game counterparts, 18 corresponding m-game activities (viz. tailor-made activities) were programmed to be included in, as well (see M-game). At first, the reading texts with their exercises were selected from *English for the Students of Computer Science* (Hosseini, Mohammadi, Hekmatshoar Tabari, & Rahbar, 2013) and *Oxford English for Electronics* (Glendinning & McEwan, 1993). Likewise, the scene was set to the effect that the compartments of the lessons could be met and used in collective manner. To visualize the trainees' performance information in an easy-to-understand format, assessment feature was added to the parts of the lessons.

It is worthy of notice that grader reader approach (Nunan, 2003) was adopted. For that reason, before developing the m-game version of the reading passages, corpus-based analysis was administered and frequency of occurrence of each word item was computed in the chosen passages lest trainees were exposed to content that is too difficult to handle.

M-games: Attempt for developing the m-game counterparts of the passages for delivery outside the classroom was made. The m-game was virtual versions of Iranian native game of *Xane Bazi* already adapted to the mobile screen to be accessed by trainees via the Internet. This way, mobile structure of *Xane Bazi* was a template, namely sandbox mould, for embedding the materials in it. The advantage of using native game is that once the process of materials development is familiar to trainees, everyone has knowledge for developing L2 materials (Mashhadi & Khazaie, 2015). However, this template was developed and filled in two different manners. While prefabricated template of the m-game with the embedded materials was displayed on the commercially produced PDA for the first-group participants, the second-group participants

made PDAs on their own to upload their own self-made authorized materials into them.

The backdrop of the templates provided a context against which the trainees' apriori knowledge could be activated, which, in turn, helped the trainees in interpretation. Getting the participants to read in the extramural situations, the stone slabs engraved with the excerpts were put beside the virtual playgrounds. They were brief excerpts from authentic passages. To be exact, strands of real stories, containing special technical vocabulary items that were available in the taught passages of the textbooks, were changed into verbal cues to be brought together by the trainees. Therefore, m-games were not simply digital representation of the textbook exercises that had already practiced by the trainees in the classroom. An excerpt of m-game is displayed in Figure 1.



Exploring the Role of M-Game as a Seat of ESP Reading...

Figure 1. An excerpt of m-game

Assembling the m-game-mediated activities was like jigsaw puzzle. The trainees should toss the slabs laid out beside the background picture of the m-games in the sections of the backdrop that contained pictorial representations of those written slabs; that is, selecting the texts that jibed with the backdrop images. The m-games required the trainees to practice the materials within the interactive practicing context in collaboration with their fellow members in triads.

1.1. Procedure

Drawing inspiration from the Nunan's *ACTIVE* teaching system (Nunan, 2003, p. 75), two scenarios were defined to conduct this study (Figure 2).

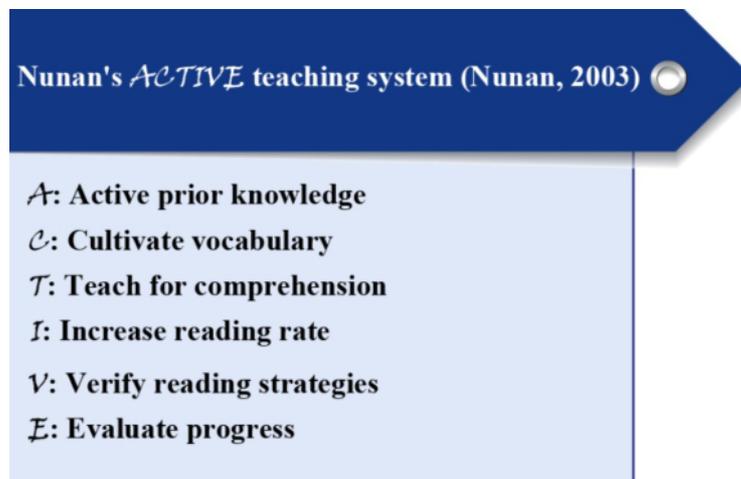


Figure 2. The Employed System

It was chosen to organize this study through a three-stage sequence of introduction, treatment and assessment as well as interview as follows:

Opening: A basic introduction to the m-game-mediated blended course and how the course is to be administered was provided. Put simply, the

procedure which the trainees were to follow was illustrated in a separate session before starting the Treatment. The trainees were taught to be able to figure out how to perform well. In the main, this helped the trainees to get an overall view of the study. In this initial phase they were taught to practice the contents in triads in collaboration with their groupmates (i.e., fellow members) in and outside the classroom.

Treatment: The blended lessons were designed to engage the trainees in using materials in more trainee-centered manners and through more spontaneous ways of reading. To see which platform proves efficient to work towards this goal, two different scenarios were set; that is, first scenario with prefabricated virtual materials and second scenario with the trainees' self-made virtual materials. For these scenarios two rounds were identified: teaching and practicing round inside the classroom and mobile practicing (m-practicing) outside the classroom. Here learning vocabulary and reading were broken down by teaching the trainees inside the classroom and guiding them all through the course to complete the exercises. More precisely, the rounds are as follows:

A. First round: Collective practicing in triads took place after the instruction in the classroom. In this round, at first the trainees were taught the materials by the instructor (i.e., the researcher, here in this study). Then, they worked together to accomplish the class assignments (mostly exercises of the books) by sharing their knowledge. Training, practicing, and formative assessment were integrated in the classroom activities. It is of note that this initial round was the same for the two employed scenarios. Accordingly, exercises of the textbook played role as pretask which helped build the participants' schemata regarding the content materials

Exploring the Role of M-Game as a Seat of ESP Reading...

B.Second round: The extramural period was covered by practice through the medium of prefabricated and self-made m-games for the first- and second-group trainees, respectively. For the first-group trainees the m-game-mediated materials were presented on their PDAs devices as soon as they got off from the college. At this point the trainees reminded that they need to complete the m-game-mediated assignments and the focus is on the newly taught vocabulary items. The playgrounds (viz. m-games) were presented as a multiplayer game world, in which the trainees accumulated points by reading new texts and interacting with their fellow members. Here the trainees have access to similar information. This information needs to be weighed up in order for the m-game-mediated tasks to be accomplished.

Along these lines, to see if giving the trainees a voice in the process of teaching and learning bears any fruitful result or not (i.e., to tackle the second research question), in this round the second-group trainees helped to develop PDA (viz. learning medium). The trainees in the second group developed their own extramural practices, namely self-made materials, as well. The trainees were required to collaborate to develop hardware and software. These self-made PDAs were made by the trainees before starting the course; however, the materials were developed by them over the length of the course to be run on the PDAs by the help of the researcher. Before the self-made materials were turned in to be saved and displayed on the trainees' self-made PDAs, of course, checked for flaw, although researchers kept their involvement to a minimum. Thereby, the trainees provided each other with feedbacks on the developed materials. If the materials could be used by almost all the trainees they were saved as the materials to be delivered to the trainees throughout the course. The researcher had decided on the topic and types of materials which were to be developed by the trainees. Interestingly, though technical features were

different cues than L2 pedagogical points, they went hand-in-hand. The second-group trainees' ability for developing the materials was not taken into account as they were assessed. In addition, in the extramural setting, once the trainees got to develop tools and materials, they set the scene to search for this purpose; that is, there was conferencing among the trainees and with researcher, in order to work out proper materials of m-game mediated L2 learning.

After presenting the materials to the trainees, they tossed the slices (viz. verbal stones) in coordination with the visual features of the virtual playgrounds, namely m-games. Of course, the struggle to perform well in the setting of ESP reading skill learning extends far more deeply than unscrambling the parts of games. The trainees must use L2 to share the information seeing that the employed m-games were multidirectional information gap type; that is to say, each trainee in the triads had information that the other groupmates needed. The researcher supported the trainees' effort, guided them, and provided cues for fulfilling the m-game-mediated activities. The practices continued for 15 minutes until all the parts of the m-games were fabricated.

Regular assessment following accomplishing each m-game-mediated activity enabled the researcher as well as the trainees to monitor the progress during the course. On that account reading assessment, in the extramural situation, took place as the materials were practiced through m-games by the trainees. In short, in considering the activities inside and outside the classroom, the ordering and prioritizing the flow is like this:

(actual classroom practices + extramural practices)

Moreover, the following statement was adapted to assess the trainees' performance inside and outside the classroom:

- Grammatical accuracy of the answers on a scale of 0-5;

Exploring the Role of M-Game as a Seat of ESP Reading...

- Using recently taught materials consisting both application and comprehension of the vocabulary items in reading passages on a scale of 0-15. This rubric outlines the weight of accuracy in relation to content and meaning. Figure 3 is a pictorial representation of the self-made scenarios.

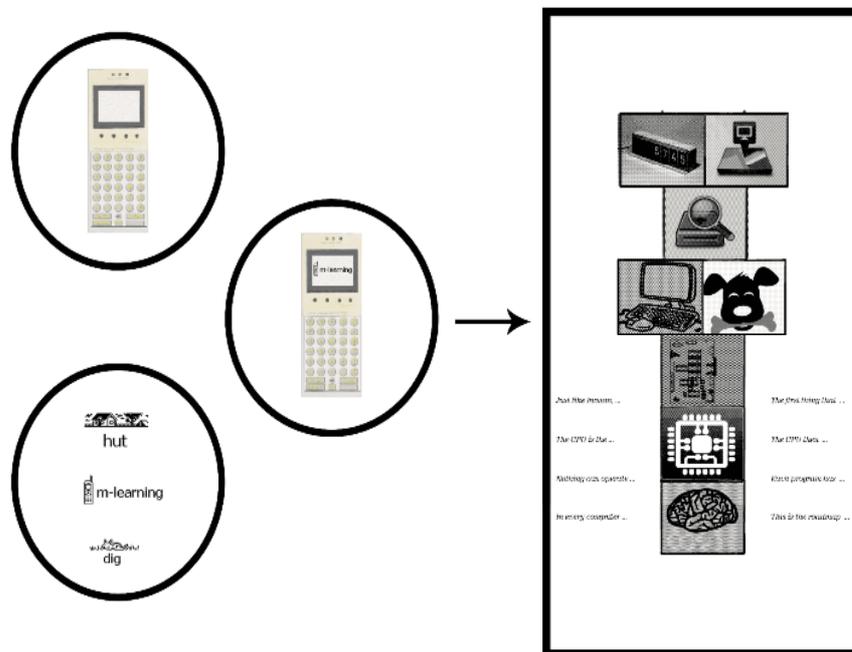


Figure 3. A Pictorial Representation of the Self-Made Scenario

Interview: To settle the third question and to elicit feedback from the participants about their experience the focus-group interview, as a follow-up, was slotted in. To that end, the interviewing committee debriefed the selected participants about the relative merits of the course. Trainees reported back on the implementation and use of game in the blended platform. Interviews were transcribed for analysis. Afterwards one of the researchers compiled the results of interview and reported what they said. For ensuring confidentiality, a coding strategy (T-Group-TVT) was adopted to conceal the name of the respondents.

Table 3. The Selected Respondents

Code	Average Score of the Assignments
T-1-L	8.6
T-1-H	17.13
T-1-L	8.8
T-1-H	17.45
T-2-L	11.5
T-2-H	19.6
T-2-L	11.95
T-2-H	19.80

Note. T means trainee; Group (1 or 2) is the number of the group to which the selected trainee belong; H and L of TVT are the trainees with highest and lowest scores, respectively.

Assessing the trainees' growth and development in reading was carried out through reading comprehension assessment, their rate of reading and completing the textbook and m-game-mediated practices as well as reading the interest survey and interview.

Table 2. The Blueprint of the Study

Groups	Assignment	Experimental Treatment	Formative Assessment
E ₁	B _p	X ₁	18 T
E ₂	B _s	X ₂	18 T

t-test (Paired & Independent)

Note. E₁, 2 = Experimental Groups; B_p = Blended assignments with prefabricated exercises, B_s=Blended assignments with self-made exercises; X₁, 2= Types of instruction; T=Formative assessment.

The procedure is represented in flowchart (Figure 4).

Exploring the Role of M-Game as a Seat of ESP Reading...

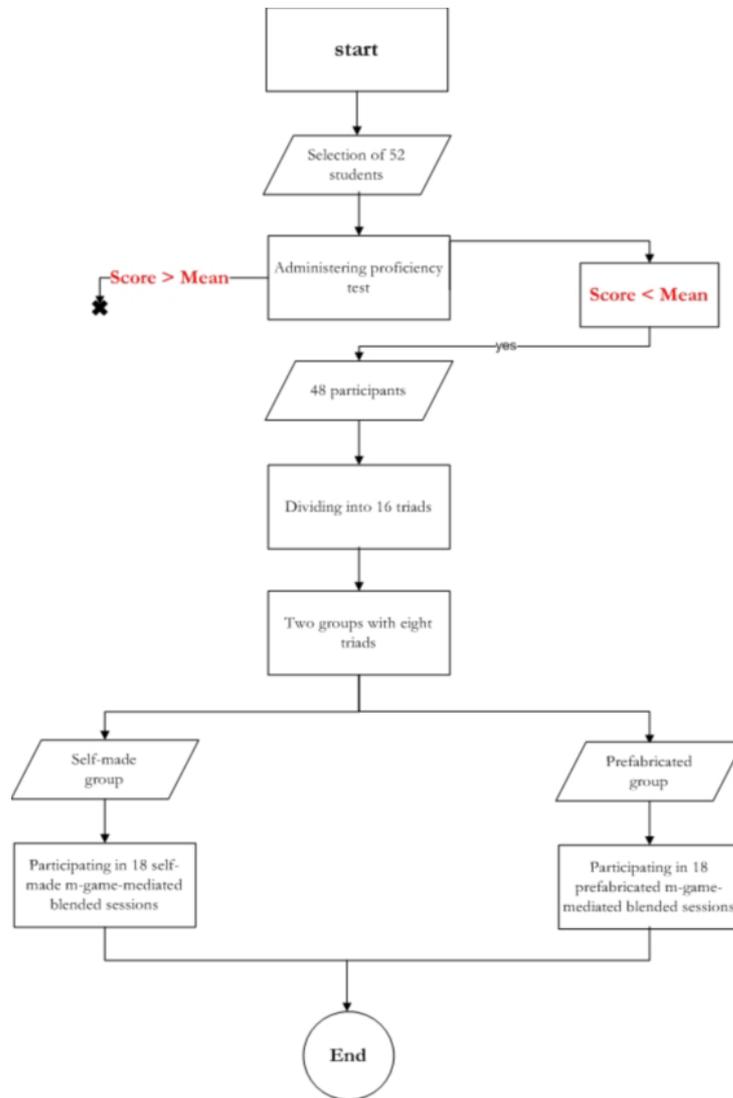


Figure 4. The Procedure of the Study

4. Result

4.1 Analysis of the Trainees' Answers to the Questionnaire

To answer the first research question, the canvassed attitude of the trainees' towards employing m-game-mediated blended platform for ESP reading as

well as the trainees' active collaboration for producing learning media and materials were sifted through. As the data revealed, the trainees' responses were strongly in support of the m-game-mediated platform for ESP reading.

On the subject of efficacy of m-game for learning ESP reading skill, a good many of the trainees (78%) regarded the m-game-mediated learning platform as a medium for opening up genuine opportunities in which trainees are able to distinguish the necessary contents to learn. In the vein of other studies (e.g., Ally, 2009; Chen, Hsieh, & Kinshuk, 2008), the trainees were of the opinion that mobile apps through creating trainees with ample practicing and learning opportunities informs them about the range of viable alternatives. Similarly, they saw the m-game-mediated platform as an adequate representation of learning ESP reading skill. They said that m-games can appear as activity that allows trainees come up with ideas in their assignments and observe language in action. This way, trainees are able to find real-world settings of natural language use with natural occurrences of new vocabulary items. Furthermore, except tiny minority of the respondents, others (91%) believed that m-game-mediated L2 learning generates good setting for assessment. The view reported by the trainees is in conformity with those of Shute, Ventura, Bauer, and Zapata-Rivera (2008) who affirmed the belief that formative assessment which is derived from game-mediated learning platforms can be exploited to guide instructional experiences.

As to the trainees' active role in the process of materials development, the trainees stated that trainees can remain on the path to their L2 learning while they can pursue their vocational goals. It was found that a great majority (83%) of the respondents were of the opinion that materials development by trainees (viz. self-made materials) encourages them to consider carefully different details and ideas about materials development and generate those that most

Exploring the Role of M-Game as a Seat of ESP Reading...

closely fit the needs of the course. They were optimistic to the extent that added that it seems the self-made m-game-mediated platform can be adapted to different L2 learning situations.

In a similar vein, more than 63 percent of the trainees viewed collaborative practicing as a hot item for the respondents since they believed more upfront time can be spent in collaborative practicing fields. They remarked that by practicing in groups, trainees are more likely to take time to reach deeper understanding. They maintained that practicing in small groups makes the learning easier; this way, trainees are able to understand the content more quickly. The level of favorable attitude towards active cooperation of trainees was to the extent that the respondents also suggested that this view can be employed with nearly any sort of L2 skills and subskills learning.

As expected, the analyzing the solicited data from the respondents' answers to the survey also illustrated that the greater number of the trainees (69%) sat attentively for blended reading and vocabulary learning sessions to be incorporated regularly into language learning syllabus, trainees will become more comfortable with reading and vocabulary learning. They believed that in the blended scenario trainees can experiment with different materials and extra information. They stipulated that, trainees understand more when they practice the contents in different context because this allows trainees a wide range of knowledge for deciphering the contents. This way, trainees are also made to remember the taught materials.

4.2. Analysis of the Trainees' Performance

To tackle the second research question regarding the comparative impact of employing different scenarios of teaching and learning on the participants' ESP reading, the second stage of data analysis was performed. For that reason, all

the gathered data were collated for analysis through descriptive statistics and *t*-test.

As regards the first group of the trainees (prefabricated learning scenario), the analysis showed a mean of 12.15 from their primary performance and 13.12 from their ending performance. The inferential statistics, which were calculated via Paired samples *t*-test, also revealed that the differences between both primary and final performance were significant (Sig.: .000, $p < .05$). Similarly, the second group including those trainees who practiced the contents through their self-made products underachieved in the very first sessions (mean=12.73) compared with their final performance (mean=15.06). This result was revealed to be significantly different, as well (Sig.: .000, $p < .05$).

Table 2. Descriptive Statistics: Average Scores of the Two Groups

Group	Number of trainees	Time	Average Score	
			Mean	SD
Prefabricated	24	First	12.15	.2129
		Final	13.12	.3387
Self-made	24	First	12.73	.5864
		Final	15.06	.6882

Note. First=the trainees' primary performance and Final=the trainees' ending performance. SD=Standard deviation.

In the main, presenting the contents in the classroom and providing opportunities for the trainees to practice and learn the contents in connected streams of learning contributed to the trainees' ESP reading improvement. The progress the trainees in the two groups made is depicted in Figure

Then, an independent two-sample *t*-test was used to discover if there are any significant differences between the trainees' scores in the prefabricated and self-made scenarios. Results showed that when the trainees engaged with materials development (i.e., self-made scenario) a superior portrait was

Exploring the Role of M-Game as a Seat of ESP Reading...

depicted (Table 3). To put it simply, the click of comprehension (Samuels & Kamil, 1984, p. 185) was faster in the second group.

Table 3. Result of Independent Sample t-test

Group	Mean	SD	t	df	Sig.
Prefabricated	12.64	.57	-3.652**	862	.001
Self-made	13.9	1.35			

** $p < 0.01$.

4.3 Analysis of the Selected Trainees' Answers to the Interview

To answer the third research question, the selected trainees' responses to the items of the interview were analyzed qualitatively (See the Appendix: The gist of the selected trainees' responses to the items of the interview).

5. Discussion and Conclusions

Practicing word items through the medium of blended teaching and learning platform was surfaced a suitable platform for engaging trainees in meaningful comprehension. In view of that, the blending together of various modalities enabled the trainees to then progress to comprehending the reading passages. This pedagogical manner of practicing of L2 materials gives trainees practice L2 vocabulary items before they must do so in a real-life situation. In reality, participation of trainees in the classroom before practicing the contents in the extramural situation may help to fill in the gaps (if any) in trainees' background knowledge; thus, to prevent misconception. Correspondingly, a further characteristic of using blended platform was that ESP reading difficulties can be surmounted before the reading process can be put into practice.

Results disclosed that grafting game-mediated exercises onto the blended teaching and learning platform challenge the trainees to practice the taught

vocabulary items in the tailor-made reading passages. M-game-mediated practice managed to reduce the stop of comprehending the passage. Meanwhile, the results also highlighted the fact that trainees' perceptions (i.e., trainees' acceptance of ICT-mediated learning) play a critical role in employing m-game mediated platforms. To put it another way, m-games can be employed for learning as a didactic medium as long as trainees find them useful. As a consequence, results showed that bonding m-game into the common L2 vocabulary and reading comprehension learning processes led into the Iranian trainees' outperformance. This, in turn, indicates that this platform shows more openness to the complementary change. Interestingly, learning in the blended platform points to the current statue of customary textbooks. According to this justification, though textbook assignment imposes fatigue, this does not mean that these customary assignments have no place in a climate of the present-day education. This forestalls that view that m-game-mediated learning should replace common classrooms before it prevails over (Hayati, 2009). To be exact, it does indicate that m-game-mediated blended learning should be part of a well-balanced didactic platform. Similarly, it seems necessary to take into consideration that not everybody is going to feel comfortable about practicing or learning in didactic playgrounds.

The results came out strongly in favor of L2 vocabulary and reading learning through the self-made practicing and learning context. As for that, quantitative and qualitative results revealed that the second-group trainees practiced the materials through the filter of their own products. This way, vocabulary and reading were addressed from two perspectives of preparing materials and practicing them. To be precise, one of the distinctive features of the self-made materials was that the trainees did not have to repeat the materials. In view of that, self-made materials development engendered

Exploring the Role of M-Game as a Seat of ESP Reading...

circumstances where the trainees' attention was directed towards academic argument. Developing device and materials opened up elementary opportunities for the trainees to experience materials – as opposed to simply practicing them. Once they were practicing the materials, it also focused them on the materials rather than just practicing; that being so, irrelevant information was stripped away.

Such a practicing manner gave the trainees some control over setting. Additionally, when trainees developed the realia and materials they frequently anticipated what is coming next. Placing the responsibility of developing materials which were to be embedded in the m-game on the second-group trainees' shoulder engaged the in queries about suitable materials (e.g., image, written cues, & so on). Along these lines, they drew on their apriori knowledge and experience. On the other hand, extramural materials delivery to the first-group of trainees was more extemporaneous in nature. It is worth mentioning that the greatest dissatisfaction with m-game-mediated L2 learning came when the trainees do not understand the materials. This unwelcome situation was predominantly faced with the trainees who practiced ESP reading skill via prefabricated materials. In effect, the trainees' passive role in developing realia and materials made leaning to read difficult.

The point can be made is that is self-made materials development is far more than complementary tools for getting the passage across. In practice, this seamless self-made blended platform did the groundwork for fulfilling *learning by doing* in the case of Iranian TVT trainees' L2 learning. What is more, involving the trainees in the materials development processes promoted their ability to read at an appropriate rate with satisfactory comprehension. A possible explanation for this might be that "reading comprehension can be significantly enhanced if background knowledge can be activated" (Nunan,

2003, p. 74). In the same vein, Stockwell (2008) concludes that, while implementing ICT-mediated learning, it is necessary to allow students explore, try out and get familiar with ICTs so as to enjoy their benefits through time. The results thus obtained seem to provide further confirmation to the assertion that learning L2 English by designing and developing materials can be referred to as *the cult of authenticity* (Day & Bamford, 1998, p. 53). Notwithstanding, this doesn't mean that it is crucial to limit TVT students to only devising instructional devices and materials for outperformance in L2 learning.

Overall, the results hitherto reached seem to bear testimony to the statement that through recycling the ingredients of the contents, materials development process enriches trainees' mastery of vocabulary items and comprehension (Dziuban, Hartman, & Moskal, 2004). That is to say, they challenge the trainees to try to employ the word items presented in the classroom in other texts and contexts; so, they are able to voice what they think. Like so, the situation could reduce the subsequent overwhelming workloads; thus, in the long run, such activities have more of an impact on enhancing trainees' L2 knowledge. On those accounts, the self-made materials may appear to them more user-friendly. In effect, content development communicates to trainees considerable information about the materials and raise their awareness of the materials.

Seeing that the second-group trainees' outperformance must be due to some extent to their extra opportunities to compile and develop materials, this study underscored trainees' active and self-directed involvement as the prime features of learning to read. In general, success in the m-game-mediated blended ESP reading skill learning hinged on the way they practiced the materials in the extramural settings. This later finding also corroborates the result that ESP reading comprehension normally takes place in the collective

Exploring the Role of M-Game as a Seat of ESP Reading...

attempt of the trainees to learn. In essence, the produced outcome of the study highlighted the vital importance of genuine interaction among L2 trainees. And this is consistent with Nunan's (2003) report "[that] contemporary teachers and learners realize that efforts to communicate meaningfully are even more important than perfect [use of the content materials]" (p. 115). As a result, success in learning ESP reading skill is not simply the outcome of employing m-games.

Interestingly enough and all for the above findings, this study detected that materials development can be integrated into a preintermediate L2 English classroom. It seems unavoidable for classroom approaches to steer clear of overemphasis on passive role of trainees in the ICT-mediated teaching and learning platforms.

The results suggests that practitioners have to bear in mind that the main concern is to make sure that vocabulary learning does not overwhelm other components of L2 learning. For that reason, vocabulary learning should be kept concomitantly with other L2 learning skills and subskills.

References

- Allwright, D. (1984). The importance of interaction in classroom language learning. *Applied Linguistics*, 5(2), 156-171.
- Ally, M. (2009). *Mobile learning: Transforming the delivery of education and training*. Athabasca: AU Press.
- Anderson, N. J. (2003). Metacognitive reading strategies increase L2 performance. *The Language Teacher Online*, 27(7), 1-3.
- Ashraf, H., Ghanei Motlagh, F., & Salami, M. (2014). The impact of online games on learning English vocabulary by Iranian (low-intermediate) EFL learners. *Proceedings of the International Conference on Current Trends in ELT 98*, 286-291.

- Baker, T. L. (1994). *Doing social research*. New York, NY: McGraw-Hill Inc.
- Barley, K. (2014, November 4). The ultimate mind map course for education. *ITEN*. Retrieved from <https://udemy.com/learn-how-to-use-ipad-apps-in-education-and-in-yourclassroom/?siteID=YpurN1DmKSUVIIFOVW9AOKdpBBxKRjBHg&LSNPUBID=YpurN1DmKSU>
- Bhaskar K, S. (2013, November). Few great ways to teach skills like critical thinking and problem solving. *EdTech Review*. Retrieved from <http://edtechreview.in/news/news/trends-insights/insights/771-great-ways-to-teach-skills-like-critical-thinking-and-problem-solving?>
- Carvalho, A. (2014). 5 trends to rock education. *Technology News and Innovation in K-12 Education*, 17(4), 26-27.
- Çelik, S. (2015). Investigating the effect of student response system supported think-pair-share pedagogy on preparatory school EFL students' vocabulary achievement. Master's thesis). Retrieved from Middle East Technical University.
- Dziuban, C. D., Hartman, J. H., & Moskal, P. D. (2004). Blended learning. *Educause*, 7, 1-12.
- Glendinning, E., & McEwan, J. (1993). *Oxford English for electronics*. Oxford: Oxford University Press.
- Horn, M. (2015, December 24). How it [blended learning approach] works. Retrieved from <http://www.eschoolnews.com>.
- Hosseini, S. M., Mohammadi, M. J., Hekmatshoar Tabari, B. & Rahbar, A. (2013). *English for the students of computer science*. Tehran: Hoormazd Publication.
- Khazaie, S., & Ketabi, S. (2010). Contribution to vocabulary learning via mobiles. *English Language Teaching*, 4(1). 174-185.
- McDonough, J., & Shaw, Ch. (2005). *Materials and methods in ELT*. Malden, MA: Blackwell Publishing.
- Renwick, L. (2015, December 24). Where blended meets personalized learning—and gets results. Retrieved from <http://www.eschoolnews.com>

Exploring the Role of M-Game as a Seat of ESP Reading...

- Shute, V. J., Ventura, M., Bauer, M., & Zapata-Rivera, D. (2008). *Monitoring and fostering learning through games and embedded assessments*. Princeton: Educational Testing Service.
- Stockwell, G. (2008). Investigating learner preparedness for and usage patterns of mobile learning. *ReCALL*, 20, 253–270.
- Vahdat, S., & Rasti Behbahani, A. The effect of video games on Iranian EFL learners' vocabulary learning. *The Reading Matrix*, 1, 61-72.
- Widdowson, H. G. (1990). *Aspects of language teaching*. Oxford: Oxford University Press.
- Zarei, A. A., & Gilanian, M. (2013). The effect of multimedia modes on L2 vocabulary learning. *International Journal of Management and Humanity Sciences*, 2(5), 1011-1020.

**Appendix: The Gist of the Selected Trainees' Response to the Items
of the Interview**

Code	Average Score of the Assignments
T-1-L	Using the m-game in the extramural or nonformal part of a blended L2 learning platform was a new reason to practice- albeit a simple one.
T-1-H	I believe that it is important for me to have a proper grasp of the contents so that I can then be better geared up to smooth my progress in reading.
T-1-L	A broader view of L2 learning began to take hold outside the classroom, namely, in the extramural situations
T-1-H	In the extramural situations, where I practiced via m-games, I have more flexible times than I have in the common classrooms.
T-2-L	M-games assisted trainees to have ample opportunity to use content materials.
T-2-H	The exercises that provide opportunities for trainees to communicate well with each other are more interesting and more unforgettable.
T-2-L	I understand my groupmates with relative ease in the playground and inside the classroom.
T-2-H	In such way [once trainees develop self-made materials], the platform challenges the trainees to incorporate new features into the learning situations.